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ASSESSING THE STATUS OF URBAN PUBLIC SCHOOL
DESEGREGATION: A CASE SURVEY APPROACH

The University of Oklahoma

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THE UNIVERSITY OF OKLAHOMA
GRADUATE COLLEGE

ASSESSING THE STATUS OF URBAN PUBLIC SCHOOL
DESEGREGATION: A CASE SURVEY APPROACH

A DISSERTATION
SUBMITTED TO THE GRADUATE FACULTY
in partial fulfillment of the requirements for the
degree of
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BY
ROBERT E. ENGLAND
Norman, Oklahoma

1982

ASSESSING THE STATUS OF URBAN PUBLIC SCHOOL

DESEGREGATION: A CASE SURVEY APPROACH

APPROVED BY

DISSERTATION COMMITTEE

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TO

Dave--my teacher, my colleague, and my friend

Dian--my love and my life

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ASSESSING THE STATUS OF URBAN PUBLIC SCHOOL
DESEGREGATION: A CASE SURVEY APPROACH

CHAPTER I

THE HISTORICAL AND LEGAL LINEAGE OF
PUBLIC SCHOOL DESEGREGATION

Introduction

On May 17, 1954, the U.S. Supreme Court officially declared that the "separate but equal" doctrine of Plessy v. Ferguson (1896) would no longer be tolerated. In the now famous case of Brown v. Board of Education of Topeka (1954: 495) the Court, based on the equal protection clause of the Fourteenth Amendment, delivered the unanimous opinion that "in the field of public education the doctrine of 'separate but equal' has no place. Separate educational facilities are inherently unequal." In order to enforce its mandate, one year later in Brown II the Court, again unanimously, ordered local school authorities to comply with its earlier decision and desegregate public schools "with all deliberate speed" (Brown v. Board of Education of Topeka, 1955: 301).

More than 25 years have passed since the second Brown decision, and efforts to desegregate American public schools still continue. While considerable desegregation progress has been made,

especially in the South, a recent U.S. Civil Rights Commission (1979: ii) report indicates segregation in many school districts "remains at discouragingly high levels." The Commission's survey of 47 districts reveals that almost 4.9 million or 47 percent of all minority children still attend schools considered at least moderately segregated. The dismantling of dual school systems in America continues to be a vital but unrealized national goal.

But what strategies can the courts mandate, or local school officials initiate to desegregate local school systems effectively and equitably? "There are well over 1,000 articles, books, and circulated papers which present some form of empirical evidence on school desegregation" (Crain and Hawley, 1981: 3). Despite this mass of information, much of the research on desegregation remains in such a form that it does not provide very useful policy guidance for the courts or local school officials. Or, as one federal district court judge commented, "much of the current research replies to precise policy based questions with the ambiguity of a Delphic oracle. . . . (quoted in Hawley and Rist, 1977: 414). Continued efforts must be forthcoming to remedy this policy-oriented information lacuna. The research presented here is intended to contribute to that end.

The present study attempts to go beyond previous research in two important respects. First, in general, previous studies of school desegregation have used either an aggregate, comparative research design involving a large number of cities or have taken the form of case studies. While the former approach facilitates the use of various bivariate and multivariate statistical techniques and enhances

generalizability of research findings, it often masks or fails to account for unique or unusual conditions found in individual cities' desegregation efforts. For example, most aggregate school desegregation studies do not employ as explanatory variables what might be referred to as "desegregation process variables"--e.g., superintendent and school board support, desegregation resistance, citizen participation, elite support, etc. In contrast, case studies usually devote considerable attention to the politics and process of school desegregation, but extreme caution must be taken in generalizing research findings across cases (see Meier and Brudney, 1981: 133).

This study employs a relatively new technique called the case survey method, which combines certain features of aggregate analysis and case studies. The central purpose of the case survey method is to aggregate and generalize across a number of case studies (McClintock, et al., 1979: 626). The approach requires that an analyst-reader record information about individual cities' desegregation efforts on a closed-ended questionnaire (see Appendix A) so that these experiences can be quantified, aggregated, and subjected to systematic analysis. In one sense, the case survey approach can be viewed as a compromise methodology which facilitates the comparative (quantitative) analysis of location-specific case study findings. The method has been used successfully in two recent studies. Yin and Yates (1975) utilized the case survey approach to analyze local government decentralization. And Yin, Heald, and Vogel (1977) employed the method to assess the state and local government innovation process.

For present purposes the case survey method is used to collect vital information needed to investigate three sets of questions.

- o Which desegregation strategies are most commonly employed across school districts? What is the relationship between the type of desegregation strategy employed by a district and the district's success in reducing racial isolation?
- o What are the "determinants" of school desegregation success? Do certain external influences, school district characteristics, desegregation process variables, and desegregation strategies facilitate or impede the school desegregation process?
- o What factors explain white enrollment declines? Is desegregation success a good predictor of the white exodus of students from the school system?

This study extends previous research in a second important way. Desegregation scholars frequently lament the lack of "theory" in the school desegregation literature. For example, Fitzgerald (1975: 1) states: "The principal impediment to systematic empirical research on the politics of education has been the lack of a broad integrating theoretical framework." Similar sentiments are echoed by Crain and Hawley (1981: 5): "The key to enhancing the productivity of desegregation research is the development of theory to guide research design and analysis." Accordingly, in this study considerable attention is devoted to developing a theoretical base from which school desegregation as a public policy/process can be viewed.

In sum, employing a relatively new data collection and aggregation technique known as the case survey method and a theoretical framework that conceptualizes school desegregation as a public policy that must be implemented at the local level, an attempt is made to assess the impact of three types of influences--external forces, school district characteristics, and desegregation process variables (including desegregation strategies)--on two school desegregation outcomes: the success of school districts in ending racial isolation (desegregation success) and white enrollment decline (generally referred to as "white flight").¹ The 52 school districts included in the study represent those for which written information was available among the total of 261 districts with a 1976 enrollment of 20,000 or more students. Two other limitations were imposed on the selection process. First, the desegregation effort must have taken place between the years 1968 and 1976 (the measure of school desegregation used in the study is limited to that period). Second, the district must have had a minimum enrollment of 10 percent during at least part of the 1968-1976 time frame.

The study is organized into seven chapters. The remainder of this chapter traces the historical and legal foundations of public school desegregation in the United States. Chapter 2 attempts to develop an appropriate theoretical framework for the understanding of school desegregation as a national public policy. In Chapter 3 the research design employed in the study is presented. Chapters 4 through 6 summarize the results of three sets of data analyses: Chapter 4 examines the effectiveness of commonly employed desegregation techniques in reducing racial isolation; Chapter 5 presents the "determinants" of

desegregation success; and Chapter 6 is devoted to explaining white enrollment declines. Finally, Chapter 7 summarizes and discusses the findings and implications of the study.

Historical/Legal Foundations
of School Desegregation²

. . . no state shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any state deprive any persons of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws (United States Constitution, Fourteenth Amendment, Section I).

Interpretation of the Fourteenth Amendment has plagued judges since its adoption in 1868. What does it mean to guarantee that the states will deny no person the equal protection of the laws? The answer to this question is, of course, quite complex and has changed over time. For example, in 1880 the Supreme Court surmised that one of the chief purposes of the Fourteenth Amendment was "to assure to the colored race the enjoyment of all of the civil rights that under the law are enjoyed by white persons" (Strauder v. West Virginia, 1880: 306-307). Sixteen years later in Plessy v. Ferguson (1896) the Court accepted the "statutory formula of 'separate but equal' as an adequate legislative response to the command of the Constitution that no person should on the account of race be deprived of the equal protection of the laws" (Polsby, 1977: 69). While the Plessy decision did not directly involve the issue of school segregation, the Court's separate but equal doctrine condoned the practice.

Over 50 years later the Supreme Court officially ushered in the modern interpretation of equal protection of the laws as it applies

to schools. In the now famous case of Brown v. Board of Education of Topeka (1954: 494-495) the Court ruled:

. . . to separate them [children] from others of similar age and qualifications solely because of their race generates a feeling of inferiority as to their status in the community that may affect their hearts and minds in a way unlikely ever to be undone. . . . Therefore, we hold that the plaintiffs and others similarly situated for whom the actions have been brought are, by reason of the segregation complained of, deprived of the equal protection of the laws guaranteed by the Fourteenth Amendment.

According to Kluger (1975: xii) the Brown decision "marked the turning point in America's willingness to face the consequences of centuries of racial discrimination." Before assessing the impact of consequences of the 1954 Supreme Court mandate to dismantle dual school systems in America, a brief historical overview of school segregation prior to 1954 is presented.

Public School Desegregation Efforts: Pre-1954

Historically, state and especially federal courts have been charged with the responsibility of deciding whether racial isolation in public schools is permissible. And prior to 1954, in general, the posture of the courts dictated that segregation of the races was acceptable. In fact, in 1896 the Supreme Court in Plessy v. Ferguson officially condoned the practice of segregation, as long as public facilities for both races (blacks and whites) were equal.

While the Court's decision in Plessy seems antithetical to the democratic norms upon which this nation was founded, it is important to remember that the decision was handed down by a "conservative" court responding to a perceived national public mood. A brief overview of events leading to the decision will illustrate this point.

In 1849, the father of a five-year-old black child brought suit against the City of Boston (Roberts v. City of Boston, 1849). On her way to the "black school" young Sarah Roberts was required to walk past five white schools. After repeated efforts to enroll her in a white school closer to home failed, Sarah's father hired the future senator and abolitionist Charles Sumner to represent him and went to court. Sumner argued that "segregated schools violated state law which hold all persons, 'without distinction of age or sex, birth or color, origin or condition,' to be equal before the law. . . . segregation 'brand[s] a whole race with the stigma of inferiority and degradation'" (Gottron, 1979: 590). Roberts and Sumner lost the case. Massachusetts Chief Justice Lemanuel Shaw in his decision commented:

It is urged, that this maintenance of separate schools tends to deepen and perpetuate the odious distinction of caste, founded in a deep-rooted prejudice in public opinion. This prejudice, if it exists, is not created by law, and probably cannot be changed by law (Roberts v. City of Boston, 1849: 206).

Nineteen years and the Civil War passed before minority groups had a strong constitutional case for calling for the end of dual school systems. Following the conclusion of civil strife, a series of three amendments were added to the U.S. Constitution. Generally referred to as the "Civil War Amendments," the Thirteenth (1865), Fourteenth (1868), and Fifteenth (1870) Amendments prohibited respectively--slavery and involuntary servitude, the states from denying to any person the equal protection of the laws, and abridging the right to vote on account of race or color.

The Supreme Court, interpreting the intent and scope of the Fourteenth Amendment, handed down two major decisions in 1873 and 1883 that set the stage for their forthcoming ruling in Plessy. In the Slaughterhouse Cases³ (1873: 74) a 5 to 4 divided court ruled:

It is quite clear . . . that there is a citizenship of the United States and a citizenship of a State, which are distinct from each other. . . . the entire domain of the privileges and immunities of citizens of the States lay within the constitutional and legislative power of the States. . . .

The Fourteenth Amendment as it applied to the privileges and immunities of national citizenship protected citizens from state-imposed restrictions on, for example, the right to petition the federal government and the right to vote in federal elections. Other privileges and immunities that were granted as part of state citizenship were outside the purview of federal protection. In short, the decision of the Court in the Slaughterhouse Cases sustained state autonomy in establishing local privileges of residents.

In 1883, the Court condoned segregative acts by private businessmen. In the Civil Rights Cases⁴ the Court nullified the Civil Rights Act of 1875 which required equal access and enjoyment, regardless of race, of public transportation, inns, theaters, etc. The Fourteenth Amendment, the Court surmised:

. . . does not invest Congress with power to legislate upon subjects which are within the domain of state legislation; but to provide modes of relief against state legislation or state action. . . . It does not authorize Congress to create a code of municipal law for the regulation of private rights. . . . [to do so] would be to make Congress take the place of the State Legislatures, and to supercede them. . . . (Civil Rights Cases, 1883: 11, 13).

The significance of the Supreme Court declaration in 1883 that the Civil Rights Act of 1875 as passed by Congress was unconstitutional cannot be ignored. For as Swisher (1957: 176) reminds us:

. . . the majority of the Supreme Court not only disposed of the Civil Rights Act of 1875 but also removed from Congress in future years any sense of obligation it might otherwise have developed for enactment of broad civil rights legislation by its holding that Congress had not such constitutional power. As a result, gradual changes in public sentiment in favor of protection of the rights of the Negro have found their limited expression not through Congress, where political matters should have their fullest consideration and where the democratic process is supposed in the main to be worked out, but rather in the executive and judicial branches.

In fact, over 80 years would pass before the Congress would once again attempt to pass a broad, sweeping civil rights package (Civil Rights Act of 1964; Voting Rights Act of 1965). In retrospect, however, the decision of the Court in the Civil Rights Cases reflected popular public sentiment:

[T]he mood of disillusionment and weariness with protection of Negro rights proved too ephemeral to serve as an adequate basis for a statement of constitutional law. . . . Other than Negroes themselves and a minority of faithful friends, the people were tired of giving special protection to the former slaves. It was felt to be time for the return to power of the dominant factions in the several communities (Swisher, 1957: 175, 174).

It is against this historical backdrop that the Supreme Court decided in 1896 that "separate but equal" was an adequate response to the Fourteenth Amendment's requirement of equal protection of the law.

On May 18, 1896, in an 8 to 1 vote the Supreme Court upheld a Louisiana law requiring railroads operating in the state to provide separate cars for whites and blacks. "If one race be inferior to the other socially, the Constitution of the United States cannot put them

upon the same plane" (Plessy v. Ferguson, 1896: 551-552). In the lone dissenting vote Justice Harlan warned that the decision would "in time, prove to be quite as pernicious as the decision made by this tribunal in the Dred Scott Case.⁵ . . . [the law] is inconsistent with the personal liberty of citizens, white and black . . . and hostile to both the spirit and letter of the Constitution. . . ." (Plessy v. Ferguson, 1896: 559-563). In the decision the Court stated that as long as facilities provided blacks were equal to those provided whites, state-imposed segregation laws did not violate the Fourteenth Amendment. The Court also ruled that segregation was not construed as a form of slavery, and therefore did not violate the Thirteenth Amendment.

As a result of the Plessy decision, discrimination based on race was officially sanctioned. For example, as late as 1954 the 11 states of the original Confederacy, six border states (Delaware, Kentucky, Maryland, Missouri, Oklahoma, and West Virginia), had state laws, and the District of Columbia had a local law requiring the separation of races with respect to the use of public facilities (e.g., transportation, water fountains, schools, restaurants, etc.). The constitutionality of requiring separate schools for whites and minorities did not go unchallenged. In three major cases (Cumming v. Richmond (Ga.) County Board of Education, 1899; Berea College v. Kentucky, 1908; and Gonglum v. Rice, 1927) originating in three different states (Georgia, Kentucky, and Mississippi), efforts were undertaken to overturn the decision. In all three cases, however, the Supreme Court ruled in favor of the states: The individual states and not the federal government would determine local school policy.

While efforts to attack the "separate" half of the separate but equal doctrine proved unsuccessful, efforts to challenge the "equity" of segregated facilities were more successful. Aided by an organization founded in 1909 known as the National Association for the Advancement of Colored People (NAACP), in the early 1930s a frontal assault on the equality of segregated schools was begun. Plaintiffs began to show the fallacy of separate but equal by documenting disparities in educational expenditures among black and white schools. For example:

Alabama, Florida, Georgia, and Mississippi were spending five times as much on the education of every white child as on every black child. Maryland, North Carolina, Oklahoma, Texas, and Virginia were spending twice as much (U.S. Commission on Civil Rights, 1981: 5).

In 1939, the first of four major court decisions which would ultimately lead to a reinterpretation of the federal government's role in school desegregation was rendered. In Missouri Ex rel. Gaines v. Canada (1938) the Supreme Court ruled that Lloyd Gaines, a black, should be admitted to the all-white University of Missouri Law School. Missouri school officials denied Gaines admission on the basis that the University did not operate a separate law school for blacks and even offered to pay his tuition if he gained admission to an adjacent state law school. Commenting on the decision Chief Justice Charles Evans Hughes stated:

. . . The question here is not of a duty of the state to supply legal training, or the quality of the training which it does supply, but of its duty when it provides such training to furnish it to the residents of the state upon the basis of an equality of right. By the operation of the laws of Missouri, a privilege has been created for white law students which is denied to Negroes by reason of their race (Missouri Ex rel. Gaines v. Canada, 1938: 349).

In short, the Supreme Court ruled that "if separate but equal meant anything, it meant that the state was obliged to deliver on the promise of equality within its own borders" (Polsby, 1977: 71).

The Gaines decision set the context for three more court cases of a similar nature. In Sipuel v. Board of Regents of the University of Oklahoma (1948) the Court ordered a black law student be admitted into the University of Oklahoma law school. In Sweatt v. Painter (1950), the Supreme Court overruled a state court decision and ordered the University of Texas to enroll a black law student. Finally, in McLaurin v. Oklahoma State Regents for Higher Education (1950) the Supreme Court held unconstitutional the segregative acts of the University. McLaurin, an education Ph.D. student, was admitted to the University but was required to sit in a special chair in the classroom, library, and cafeteria. The Court ruled such restrictions "impair and inhibit [McLaurin's] ability to study, to engage in discussion and exchange views with other students, and, in general, to learn his profession" (McLaurin v. Oklahoma State Regents for Higher Education, 1950: 641). The desegregation pendulum had begun to swing. Separate but equal as official court policy would stand for only four more years.

Brown I and II

In 1954, the Supreme Court overturned the separate but equal doctrine of Plessy v. Ferguson (1896). The decision, generally known as Brown I, established school desegregation as a national public policy. In essence, the Court ruled that segregation of children in public schools solely on the basis of race, even though the physical

facilities and other tangible factors may be equal, deprived children of minority groups of equal educational opportunities.

Brown I was actually a combination of five different school desegregation cases which the Court ruled on collectively in 1954. The original case was filed in 1951 by Oliver Brown. Mr. Brown's daughter, Linda, was required to walk 20 blocks to her black school even though a white school was located in her neighborhood. In 1951, a federal district court ruled that while segregation was detrimental to black children, the schools (black and white) in Topeka were substantially equal.

The second case (Briggs v. Elliott) involved students in Clarendon County, South Carolina. In 1950, black parents filed suit seeking an end to segregated schools in the district. A federal district court denied the request but ordered the equalization of county schools; black schools were found to be of inferior quality. The parents appealed the district court decision to the Supreme Court. The Supreme Court in 1952 returned the case to the federal district court for a status report on the equalization process. Upon finding that the equalization mandate was substantially completed the case returned to the Supreme Court for further consideration.

The third case (Davis v. County Board of Prince Edward County, Va.) was almost identical in nature to Briggs. A district court ordered equalization of schools but refused to integrate schools during the interim period. New Castle County, Delaware, was the setting for the fourth case (Gebhart v. Belton). Black plaintiffs documenting the inferiority of local black schools in comparison to

white schools filed a desegregation lawsuit. A state court ordered desegregation; the state supreme court upheld the desegregation decree, but the school board appealed the decision to the U.S. Supreme Court. Finally, the fifth case (Bolling v. Sharpe) concerned schools in the District of Columbia. Since the Fourteenth Amendment prohibited the states from denying citizens equal protection of the laws, plaintiffs in the nation's capital claimed that segregated schools violated the Fifth Amendment's guarantee of due process of law. After a federal court dismissed the case the Supreme Court granted review of the dismissal.

Prior to the Supreme Court's decision in Brown I, lower courts had ruled that educational facilities were approximately or soon to be equal across white and black schools in all five school districts. Thus, the overriding, primary question the Court was asked to decide "was whether public school desegregation per se was unconstitutional" (Gotttron, 1979: 593). The five cases were argued in December, 1952, and due to the importance of the cases reargument was begun in June, 1953. Thurgood Marshall, who was at the time director of the NAACP Legal Defense and Educational Fund and who in 1967 became the first black man to be seated on the Supreme Court, served as the primary counsel for the plaintiffs. John W. Davis, former U.S. Representative and ambassador to Great Britain, argued the cases for the anti-desegregation faction.

Speaking for the Court, Chief Justice Earl Warren stated:

Does segregation of children in public schools solely on the basis of race, even though the physical facilities and other 'tangible' factors may be equal, deprive the children of the minority group of equal educational opportunities? . . . We believe that it does. . . . (Brown v. Board of Education of Topeka, 1954: 493).

With respect to public school segregation in the nation's capital the Court also ruled:

In view of our decision that the Constitution prohibits the states from maintaining racially segregated public schools, it would be unthinkable that the same Constitution would impose a lesser duty on the Federal Government (Bolling v. Sharpe, 1954: 499-500).

Given its directive to desegregate, one year later in Brown II, the Court addressed the issue of implementation. In general, the Court placed primary responsibility for implementation with federal district courts and local school authorities. The Court did, however, provide some guidance for their lower court counterparts:

- (1) Local school authorities have the primary responsibility for implementation.
- (2) The function of the federal court is to decide whether a local school board's response constitutes good faith implementation.
- (3) The district court is to be guided by equitable principles, 'characterized by practical flexibility' in shaping remedies, with the pointed reminder that the principle of equal educational opportunity espoused in Brown I is not to yield simply because of disagreement with that principle.
- (4) Although the district court should take into account the practical problems of implementation, the local school authorities must make a 'prompt and reasonable start,' and thereafter the court should insure that desegregation proceeds with 'all deliberate speed' (Read, 1977: 10).

Although the Supreme Court declared segregated schools unconstitutional in Brown I and ordered school officials to desegregate with all deliberate speed in Brown II, one key component was needed to effectuate the desegregation decree--compliance. And compliance was particularly difficult to achieve, especially in the South. For example, in 1956 a tract, known as the "Declaration of Constitutional Principles," was signed by 101 of 128 members of Congress from 11 southern and border states. "The signers called the Brown decisions a 'clear abuse of judicial power,' and commended those states that intended to 'resist enforced integration by any means'" (Gotttron, 1979: 596). Thus, the struggle to fulfill the letter and spirit of the law as expressed in the Brown decisions began.

Public School Desegregation Efforts: Post-1955

According to Read (1977: 10-11) post Brown II desegregation efforts can be divided into four historical periods: (1) token desegregation efforts--1955 to 1963; (2) evolution of desegregation standards and breakdown of entrenched local resistance--1963 to 1967; (3) judicial revolution and massive integration in the Deep South--1968 to 1972; and (4) non-southern desegregation efforts and confusion over the future of desegregation--1972 to present.

Token Desegregation. The only area of the country initially affected by the Brown decisions was the South. State-imposed or de jure public school segregation was specifically forbidden by the Court. Obstruction, delays, and even massive resistance characterized the southern response to school desegregation orders. For example, the

NAACP was barred in some states. Citing state police powers, states required school segregation in order to protect public health and morals. Children were assigned to schools on the basis of aptitude tests or were allowed to attend the school of their choice. Because of years of inferior educational opportunities few blacks could compete scholastically with whites and even fewer opted to enter hostile, predominantly white schools.

Since the Court in Brown II placed primary responsibility for school desegregation with local school officials and delegated to the lower courts a monitoring "good faith implementation" role, it was these two groups who guided early desegregation efforts. And while local school officials, prompted to a large degree of public sentiment, were unsympathetic to the desegregation process, southern courts initially proved even more unsympathetic. In the first major school desegregation case following Brown, a three-judge federal district court in South Carolina ruled:

[I]t is important that we point out exactly what the Supreme Court has decided and what it has not decided in this case. It has not decided that the federal courts are to take over or regulate the public schools of the states. It has not decided that the states must mix persons of different races in the schools or must require them to attend schools or must deprive them of the right of choosing the schools they attend. What it has decided, and all that it has decided, is that a state may not deny to any person on account of race the right to attend any school that it maintains. . . . Nothing in the Constitution or in the decision of the Supreme Court takes away from the people freedom to choose the schools they attend. The Constitution, in other words, does not require integration. It merely forbids discrimination (Briggs v. Elliott, 1955: 777).

The last sentence of the above ruling became known as the "Briggs v. Elliott dictum" and was used to justify the initial approach to school desegregation orders--freedom of choice or voluntary desegregation. Freedom of choice as a desegregation strategy, however, only resulted in token desegregation. Ten years after Brown only "1.2 percent of black students in 11 southern states attended schools with whites" (U.S. Commission on Civil Rights, 1981: 12).

"Spurred by the quickening pace of the civil rights movement and passage of the Civil Rights Act of 1964, new plaintiffs embarked on the choppy seas of litigation, with new case filings increasing almost geometrically" (Read, 1977: 17-18). The time had come for "footdragging public schools to move with celerity toward desegregation. . . ."

(Singleton v. Jackson Municipal Separate School District, 1965: 729).

The United States Court of Appeals for the Fifth District, under the leadership of Judge John Minor Wisdom, and the Office of Civil Rights in HEW, took the lead in trying to establish guidelines which school officials and district courts could apply in assessing the adequacy of desegregation attempts.

The Evolution of Desegregation Standards. Passage of the Civil Rights Act of 1964 ushered in a new approach to school desegregation. Rodgers and Bullock (1972: 81) label this approach "administrative-judicial." Instead of a slow and costly process where litigants had to pursue desegregation in the courts on a case-by-case basis, the administrative-judicial approach required broad desegregation policy guidelines and cooperation between court and HEW officials. In the words of Judge Wisdom, there should be a "close correlation . . . between the

judiciary's standards . . . and the executive's department's standards in administering [desegregation] policy" (Singleton v. Jackson Municipal Separate School District, 1965: 731).

To aid district court and school officials in assessing the adequacy of school desegregation plans, in 1965 the Fifth Circuit Court declared that it would attach "great weight" to HEW guidelines⁶ that had been established pursuant to the Civil Rights Act of 1964:

. . . by assisting the courts in their independent evaluation of school desegregation plans, and by accelerating the progress but simplifying the process of desegregation the HEW Guidelines offer new hope to Negro school children long denied their constitutional rights. A national effort, bringing together Congress, the executive, and the judiciary may be able to make meaningful the right of Negro children to equal educational opportunities. The courts acting alone have failed (United States v. Jefferson County Board of Education, 1966: 847).

The "bringing together" of the Congress, the executive, and the judiciary had a significant impact on school desegregation policy. The Civil Rights Act of 1964 as passed by Congress contained three major titles that involved federal bureaucracies in the process of school desegregation. Title IV of the Act authorized the attorney general to sue segregated school districts on behalf of complainants if a person or persons were unable to bear the expense of the litigation. Title IX authorized the Justice Department to intervene in a private school desegregation court case if, in the opinion of the attorney general, the case was of "general public importance." Finally, Sections 601 and 602 of Title VI of the Act prohibited discrimination based on race, color, or natural origin under any program or activity that received federal financial assistance and granted power to administrative agencies

to issue rules and regulations that could be followed to cut off federal funds for noncompliance.

Title VI became the major tool used by the Office of Civil Rights to force recalcitrant school officials to desegregate southern schools. And while Title VI implementation and enforcement activities "bounced around, from, among, between, and through the strategic approaches of voluntarism, warfare, confusion, bluffing, and avoidance" (Radin, 1977: 208), the activities and desegregation policy guidelines issued by the Office of Civil Rights were successful in forcing compliance with the Brown mandate. "By the end of 1966 the Department of Justice 'had filed or joined its 93rd desegregation suit.' By February 7, 1967, HEW had cut off Federal funds to 34 school districts and had initiated final termination proceedings against 157 more. During the next 11 months funds to 122 school districts were terminated" (Rodgers and Bullock, 1972: 83).

According to Radin (1977: 92), it might have been easier for school officials to simply give up "minimal federal support" than to acquiesce to federal enforcement pressure. But with the passage of the Elementary and Secondary Education Act of 1965, the financial penalties for noncompliance were greatly increased. In 1970, the Justice Department made noncompliance even more costly. In United States v. Georgia the Justice Department sued 81 Georgia schools and threatened to cut off state funds to education if by the fall of 1970 the districts did not prepare plans to eliminate all-black schools. "The threat to impound state money was too severe to be ignored since, on the average, fifty-five percent of local school district's money came from the state" (Rodgers and Bullock, 1976a: 21).

In short, the decisions rendered by the Fifth Circuit Court in Singleton and Jefferson in conjunction with enforcement activities by the Office of Civil Rights and Justice Department were instrumental in breaking down entrenched southern resistance to school desegregation. Over 3,000 school districts were affected by the enforcement efforts of HEW's Office of Civil Rights, "by any reckoning, an extremely impressive enforcement achievement" (Rabkin, 1980: 338). In the late 1960s and early 1970s, however, primary school desegregation enforcement responsibility began to swing back to the courts (Bullock and Rodgers, 1975: 658); ultimate Title VI enforcement had been shifted from the Office of Civil Rights to the Justice Department under orders from President Nixon.

Massive Integration. In the late 1960s the Supreme Court took another major action to desegregate schools in the South. On May 27, 1968, in Green v. County School Board of New Kent County, Va. the Court ruled the "freedom-of-choice" desegregation plan utilized to desegregate schools in Kent County was unacceptable. Noting that no white student had chosen to attend predominantly black schools and that only 15 percent of the county's black students were enrolled in white schools, the Court surmised:

. . . the affirmative duty [of school officials is] to take whatever steps might be necessary to convert to a unitary system in which racial discrimination [is] eliminated root and branch. . . . The burden on a school board is to come forward with a plan that promises realistically to work, and promises realistically to work now (Green v. County School Board of New Kent County, Va., 1968: 437, 439).

The decision of the Court in Green marked the end of freedom-of-choice as an adequate response to desegregation orders.

Following the Green case the Supreme Court demonstrated that it expected desegregation results. In Alexander v. Holmes County Board of Education (1969), the Court vacated a lower court decision that had granted school officials a three-month desegregation delay and ordered immediate desegregation. This decision was followed by one of the most important Supreme Court cases since Brown--Swann v. Charlotte-Mecklenburg County Board of Education (1971).

In Swann the Court was asked to rule on the constitutionality of specific (and controversial) desegregation strategies. After school officials failed to present an "adequate" desegregation plan, District Judge James McMillan appointed Dr. John Finger, a well-known desegregation expert, to develop a plan for the desegregation of Charlotte-Mecklenburg school district. The plan, referred to as the "Finger Plan," required that the enrollment in as many of the 107 schools in the district as practically possible should reflect a 71/29 percent white-to-black student ratio. The 71/29 ratio was the same proportion of whites-to-blacks in the entire district. In order to achieve this racial balance, extensive busing of secondary students and the pairing and clustering of elementary schools was approved. The plan aroused considerable public opposition and, upon appeal, the Fourth Circuit Court remanded the district court's decision for reconsideration. According to the Fourth Circuit Court the busing and pairing/clustering components of the plan placed an undue hardship upon the school board and children of the district.

When the Supreme Court was asked to settle the case, four specific issues were to be addressed:

- o Can the lower courts use "racial quotas" to effectuate school desegregation?
- o Are one-race schools permissible?
- o Is the remedial altering of school zones permissible?
- o Is the busing of students to achieve school desegregation permissible?

With respect to racial quotas the Court ruled, " the constitutional command to desegregate schools does not mean that every school in every community must always reflect the racial composition of the school system" (Swann v. Charlotte-Mecklenburg County Board of Education, 1971: 24). On the other hand, the Court did rule that:

Awareness of the racial composition of the whole school system is likely to be a useful starting point in shaping a remedy to correct past constitutional violations. In sum, the very limited use made of mathematical ratios was within the equitable remedial discretion of the District Court (Swann v. Charlotte-Mecklenburg County Board of Education, 1971: 25).

Are one-race schools permissible? The Court held "that there was a presumption against one-race schools, but it refused to hold that the existence of one-race schools constituted a per se violation of the Constitution" (Read, 1977: 36). The Court also stated that "gerrymandering of school district . . . [and] pairing, 'clustering,' or 'grouping' of schools with attendance assignments made deliberately to accomplish the transfer of Negro students out of formerly segregated Negro schools and the transfer of white students to formerly all-Negro schools" were acceptable desegregation strategies (Swann v. Charlotte-Mecklenburg Board of Education, 1971: 27).

Perhaps the most politically sensitive issue the Court was asked to address concerned busing. The Court approved busing as a remedial desegregation tool and stated that busing had been an "integral part of the public education system for years, and was perhaps the single most important factor in the transition from the one-room school-house to the consolidated school" (Swann v. Charlotte-Mecklenburg County Board of Education, 1971: 29).

According to Read (1977: 38) "Swann was an opinion for all litigants." While the Court ruled that mathematical ratios were permissible, they were to be used as a starting point in shaping a remedy. The Court refused to directly deal with the issue of one-race schools; rather, it ruled that there was a presumption against them. Finally, the altering of school attendance zones and busing were authorized as valid remedial school desegregation strategies. But busing as a remedy was limited with respect to "time and distance of travel." Nevertheless, between 1968, the year the Supreme Court handed down its decision in Green, and 1972, one year after Swann, massive integration had come to the South. For example, in 1968, 68 percent of the black students in the South⁷ attended schools comprised of 100 percent minority students. In 1972, only 8.7 percent of black students in the South attended all-minority schools (U.S. Bureau of the Census, 1970: 118; 1974: 124).

Following the decision of the Supreme Court in Swann, judicial attention began to shift from the South to the North and West. The courts through a series of decisions had resolved the major issues surrounding the desegregation of southern schools. State-imposed or de jure segregation was clearly unconstitutional. Remaining issues

(after Swann) in the South largely concerned methods of implementation. But what about school segregation that resulted from settlement patterns or segregative actions which, while not officially mandated by state and local law, were supported or ignored by local officials--de facto segregation? The courts began to answer this question in 1973.

Non-Southern School Desegregation. Desegregation efforts in the North and West, at least from a judicial standpoint, are complicated by the fact that school segregation did not result from governmental (state) action. "Racial unbalance alone is not unconstitutional. . . . To find a constitutional violation in any school desegregation case, a court must find that segregation currently exists and that it was caused by deliberate governmental actions" (Von Euler and Parham, 1978: 17, 4). In short, a distinction exists between de jure (by law) segregation and segregation that occurred by accident (de facto segregation).

Until 1973, the courts primarily focused on de jure school desegregation in the South. In 1973, in Keyes v. Denver School District No. 1, however, the Supreme Court set forth the constitutional standards for school desegregation in the North and West. The Court ruled that de jure segregation is "a current condition of segregation resulting from intentional state action the differentiating factor between de jure segregation and so-called de facto segregation . . . is purpose or intent to segregate" (Keyes v. Denver School District No. 1, 1973: 189, 205, 208). In Keyes the Court ruled in favor of the plaintiffs' contentions that local school authorities had intended to create a dual school system in Denver by manipulating school attendance zones, selecting school sites which would separate races, and following a

neighborhood school policy that coincided with existing residential segregation.

The Keyes case originated in 1969. The Denver School Board had adopted three resolutions aimed at desegregating the predominantly black Park Hill area of the city. A new school board was elected and voided the resolutions. A group of plaintiffs sued and won their case; Park Hill was ordered to desegregate. Pleased with victory, the plaintiffs then sued for the desegregation of the entire school district. A federal district court ruled, however, that intentional segregative actions by school officials could only be proven in the Park Hill area; segregation in the other sections of the district were de facto in origin. The Tenth Circuit Court of Appeals affirmed the lower court decision.

The Supreme Court granted certiorari to the Keyes case and handed down its decision in June, 1973: The Denver school district was to be desegregated: The Court ruled:

We have never suggested that plaintiffs in school desegregation cases must bear the burden of proving the elements of de jure segregation as to each and every school or each and every student. . . . [C]ommon sense dictates that racially inspired school board actions have an impact beyond the particular schools that are the subject of these actions (Keyes v. Denver School District No. 1, 1973: 200, 203).

The Court's ruling in Keyes was viewed as a victory by pro-desegregation forces. De jure segregation could be distinguished from de facto segregation by "showing of intent to segregate" (Keyes v. Denver School District No. 1, 1973: 208). But as would soon become evident, the Keyes decision also meant that "plaintiffs would have to

present convincing evidence of official action responsible for dual school systems on a case-by-case basis" (Von Euler and Parham, 1978: 5).

One year and one month after the Keyes decision, in Milliken v. Bradley (1974), the Supreme Court reversed a district court-ordered metropolitan desegregation plan for Detroit. According to Yudof (1978: 93), the Court's decision in Milliken "signalled that the days of unanimity or near unanimity in desegregation cases in the Supreme Court were over."

Acting on a school desegregation case originally filed in 1970, district court Judge Stephen J. Roth ordered 53 schools located in three counties surrounding Detroit to be joined with Detroit in order to achieve a unitary school system. The Sixth Circuit Court of Appeals upheld the decision stating:

[A]ny less comprehensive . . . plan would result in an all black school system immediately surrounded by practically all white suburban school systems. . . . the only feasible desegregation plan involves the crossing of the boundary lines between the Detroit School District and adjacent or nearby school districts for the limited purpose of providing an effective desegregation plan (Milliken v. Bradley, 1973: 245, 249).

The decision of the Sixth Circuit was appealed to the Supreme Court and in a 5 to 4 decision the Court held that the district court had overstepped its remedial powers--an interdistrict or metropolitan plan was not justified in the case of Detroit. The court declared:

. . . the nature of the violation determines the scope of the remedy. . . . [T]he notion that school district lines may be casually ignored or treated as a mere administrative convenience is contrary to the history of public education in our country. . . . Before the boundaries of separate and autonomous school districts may be set aside by consolidating the separate units for remedial purposes

or by imposing a cross-district remedy, it must first be shown that there has been a constitutional violation within one district that produces a significant segregative effect in another district. Specifically, it must be shown that racially discriminatory acts of the state or local school districts, or of a single school district have been a substantial cause of interdistrict segregation. . . . In such circumstances an interdistrict remedy would be appropriate to eliminate the interdistrict segregation directly caused by the constitutional violation. Conversely, without an interdistrict violation and interdistrict effect, there is no constitutional wrong calling for an interdistrict remedy (Milliken v. Bradley, 1974: 738, 741, 744-745).

The decision of the Court rested on the fact that there was no evidence of segregation in the suburban districts and that there was no evidence that the segregated schools in Detroit proper was caused by actions originating from outside the district (Read, 1977: 45). In a dissenting opinion Justice Thurgood Marshall lamented the Court's decision to abdicate the interdistrict plan: "Negro children in Detroit will receive the same separate and inherently unequal education in the future as they have been unconstitutionally afforded in the past" (Milliken v. Bradley, 1974: 782).

Taylor (1978: 38) states that in handing down the Milliken decision the "Court began a retrenchment, from which it has not yet emerged, that appeared to be responsive to the drumbeat of criticism from the Administration and Congress." Justice Marshall in his dissenting opinion expressed similar sentiments:

Today's holding, I fear, is more a reflection of a perceived public mood that we have gone far enough in enforcing the Constitution's guarantee of equal justice than it is the product of neutral principles of law. In the short run, it may seem to be the easier course to allow our great metropolitan areas to be divided up each into two cities--one white, the other black--but it is a course, I predict, our people will ultimately regret (Milliken v. Bradley, 1974: 814-815).

Since 1974, the Supreme Court's position concerning inter-district or metropolitan desegregation plans has largely been guided by the "Milliken dictum"--the scope of the remedy is determined by the nature and extent of the violation. In 1977, the Court ruled that a metropolitan remedy for Dayton, Ohio, schools was too harsh (Dayton Board of Education v. Brinkman). But by explicitly approving a lower court decision or implicitly granting approval by refusing to grant a writ of certiorari, the Supreme Court upheld metropolitan desegregation plans in three cases.

A metropolitan plan was created for Louisville-Jefferson County in 1975. Schools in Wilmington, Delaware, and surrounding suburbs in New Castle County were officially consolidated in the fall of 1978. Finally, in October, 1980, the Supreme Court refused to grant review of Board of School Commissioners of the City of Indianapolis v. Metropolitan Development Commission of Marion County. The refusal let stand a metropolitan school desegregation remedy for Indianapolis-Marion County schools.

The use of metropolitan plans to desegregate central city-suburban schools will continue to capture the attention of the courts. For as a U.S. Commission on Civil Rights (1977b: 6, 11, 12) report indicates:

To a very great extent the remaining problems of segregation by race and national origin in public schools are problems that exist in big cities. . . . [W]e have come to a point where substantial integration of public schools can be accomplished only if the area covered is larger than the city itself. . . . There is no other approach that will deal promptly and effectively with racially isolated schools in metropolitan areas.

Busing, White Flight, and Resegregation:
Other Current Desegregation Issues

In addition to metropolitan desegregation plans, three other current desegregation related issues continue to arouse controversy and capture court attention--busing, white flight, and resegregation.

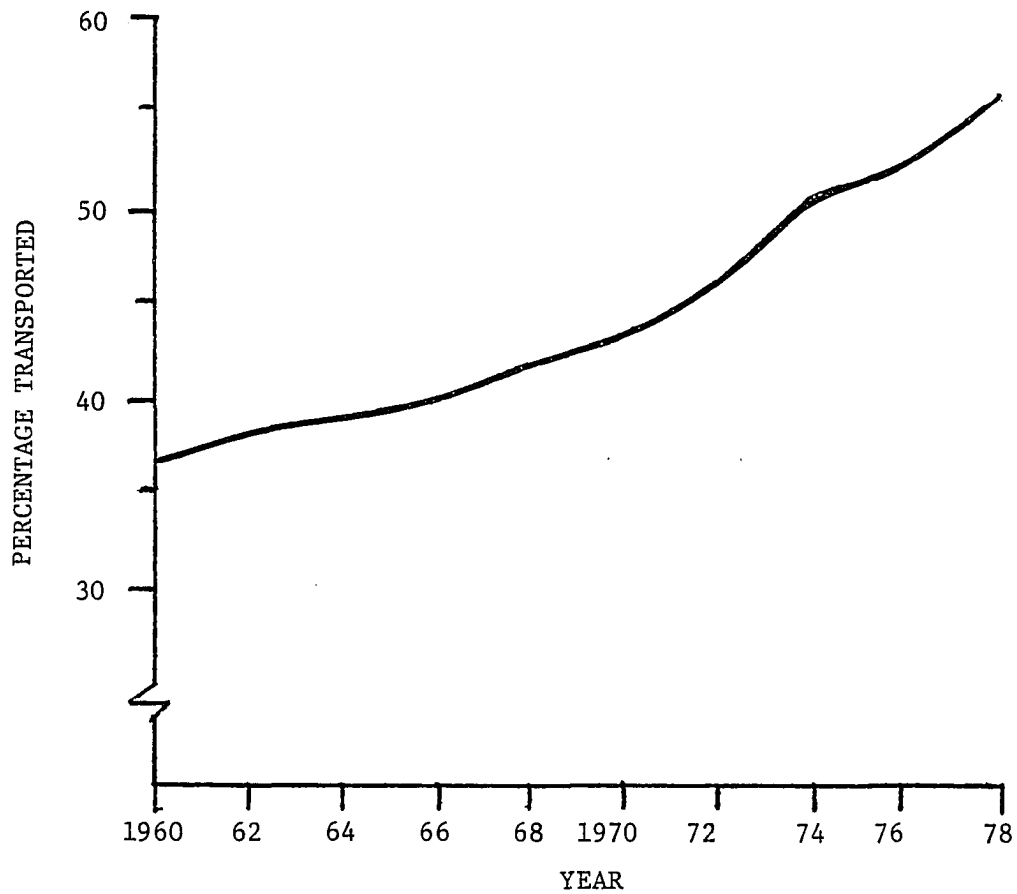
Busing

"The most vocal objections to school desegregation plans, whether of the intra- or interdistrict variety, usually concern busing" (U.S. Commission on Civil Rights, 1977b: 51). And as a recent Gallup poll indicates, whites tend to oppose busing more than do blacks. The opinion survey revealed that whites opposed busing for purposes of desegregation 4 to 1, while blacks were 2 to 1 in favor of busing as a means to achieve racially balanced schools (Gallup Report, 1981: 28).

Despite busing's negative connotations, it is important to remember that school officials have been transporting students for years. For example, after approving of busing as a remedial desegregation strategy in Swann, the Supreme Court noted that the "Charlotte school board had bused children for years in order to maintain a dual school system" [emphasis added] (Swann v. Charlotte-Mecklenburg County Board of Education, 1971: 29-30).

Figure 1 charts the growth of the proportion of public elementary and secondary school children transported at public expense since 1960. As the figure shows, in 1960 approximately 37 percent of public school students rode public-supported transportation. The rider-ship figures in 1968, the first year of the period Read (1977: 28) labels "massive integration," and 1972, the year when most southern

FIGURE 1. PERCENTAGE OF ELEMENTARY AND SECONDARY SCHOOL PUPILS
TRANSPORTED AT PUBLIC EXPENSE



SOURCE: U.S. Statistical Abstracts, 1970 and 1980 and Digest of Education Statistics 1981. Percentage based on average daily attendance.

desegregation efforts were completed, are respectively, 42 and 46 percent. In 1973, the year that the Supreme Court ordered the desegregation of a non-southern city (Denver in Keyes v. School District No. 1), the percent of students being transported at public expense was approximately 48 percent.⁸ By 1978, over 50 percent (52.8%) of students rode public-sponsored transportation.

But how much of this increase in busing is attributable to the desegregation process itself? A national survey of school superintendents performed by the U.S. Commission on Civil Rights (1977a: 46) suggests that desegregation-related busing increases are relatively small. Based on a sample of 229 school districts that reported pre- and post-desegregation busing figures between the years 1966 and 1975, the survey revealed that the percentage of minorities bused increased from 47.1 to 55.9 (9% increase). The number of white students transported before and after desegregation increased only about 3 percent, from 50.0 to 53.2 percent. Thus, despite claims to the contrary, increases in busing due to school desegregation while not insignificant are not astronomical. And minorities tend to bear a disproportionate burden of the increase.

Due to the controversial nature of school busing, the courts have been cautious in issuing busing decrees. For example, while the Supreme Court in Swann upheld the use of busing where "feasible," the Court also ruled that the remedy was limited with respect to time and distances that would "either risk the health of the children or significantly impinge on the educational process" (Swann v. Charlotte-Mecklenburg Board of Education, 1971: 30-31). Based on these vague Supreme Court guidelines, lower courts have exempted various school

sub-groups from being bused. In Thompson v. School Board (1974), the Fourth Circuit upheld a district court order that "a desegregation plan that involved long bus rides for first and second grades was not 'feasible'" (Levin, 1978: 3). Similarly, in United States v. School District of Omaha (1976), after expert testimony from a local pediatrician and the assistant superintendent of schools, first graders were exempted from the local desegregation plan.

While the busing of students, and especially young children, is highly unpopular per se, another commonly offered argument against the use of busing is that busing precipitates the withdrawal of white students from the school system. Research has shown that greater busing distances are associated with greater white flight during the implementation year of a desegregation plan (see Giles, Gatlin, and Cataldo, 1974; Giles and Gatlin, 1980; Rossell, 1980). In addition, in order to avoid busing of their young children, parents may not enroll them in local schools when they reach school age (a phenomenon known as "nonentrance") (see McConahay and Hawley, 1978).

White Flight

White flight from public schools may take two forms: Parents may remain in the school district and enroll their children in private schools or they may move out of the district. In either case the consequences of white flight pose problems for school officials. Declining enrollments signal the decline of monetary support for local schools. While controversy surrounds the exact nature of the effect of school desegregation on white flight (see Chapter 6), Armor (1978: 8)

suggests the following three points are generally agreed upon:

(1) desegregation efforts are associated with white enrollment loss in some instances; (2) such loss is conditional; it occurs under some conditions but not others; and (3) the effect most often takes place the year that desegregation efforts are begun.

The Supreme Court has not directly addressed the issue of white flight. In two cases the Court has, however, touched upon the issue. In Wright v. Emporia City Council (1972), the Supreme Court prohibited a city from withdrawing from a county school district. The Court's rationale was that since the district court had ruled that the city-county as a unit had operated a dual school system, the unit as a whole should be desegregated. Excluding the city and thereby allowing for the exodus of white students from the county system into the proposed city school system "would actually impede the process of dismantling the existing dual system" (Wright v. Emporia City Council, 1972: 466). And in United States v. Scotland Neck City Board of Education (1972: 491) the Court ruled that "while [white flight] may be cause for deep concern . . . it cannot . . . be accepted as a reason for achieving anything less than complete uprooting of the dual public school system."

The extent to which white flight as an issue has influenced lower court decisions is mixed. On the one hand the courts have refused to consider white flight in formulating desegregation strategies for schools in Louisville, Boston, and Indianapolis. On the other hand, the courts have considered white flight evidence in developing appropriate strategies for ending dual school systems in Chattanooga and Dallas (see Levin, 1978).

White flight as an unintended impact of school desegregation efforts will continue to arouse controversy and capture court attention. Ultimately the Supreme Court will be required to rule on white flight per se and suggest desegregation strategies that will help to minimize white student outmigration (e.g., metropolitan plans). White flight can negate the effects of the best conceived and implemented desegregation plan. In fact, white student losses can lead to the resegregation of a previously desegregated school district.

Resegregation

Resegregation of schools marks a "reversal or diminution of a district's or school's desegregation status toward greater racial isolation" (Hawley, et al., 1981: 2). Due to white student outmigration, changing birth and residential patterns, and enrollment in private schools, district officials who had previously achieved significant desegregation success may over time find that once again local schools are segregated.

The Supreme Court's position on resegregation is similar in nature to its policy on metropolitan desegregation plans. Substantial proof is required to show that resegregation of schools is the result of official governmental action and not a product of changing demographic patterns (Von Euler and Parham, 1978: 8). Lower courts in monitoring desegregation actions over time are guided by the Supreme Court's decision in Swann (1971: 31-32).

It does not follow that communities served by unitary systems will remain demographically stable, for in a growing, mobile society, few will do so. Neither school authorities nor district courts are constitutionally required to make year-by-year adjustments of the racial composition of student bodies once the affirmative duty to desegregate has been accomplished and racial discrimination through official action is eliminated from the system. This does not mean that Federal courts are without power to deal with future problems; but in the absence of a showing that either school authorities or some other agency of the state had deliberately attempted to fix or alter demographic patterns to affect the racial composition of the schools, further intervention by a district court should not be necessary.

In Pasadena City Board of Education v. Spangler (1976) the Supreme Court was asked to specifically address the problem of resegregation. Finding unconstitutionally segregated schools, in 1970 a federal district court ordered the desegregation of Pasadena schools. The desegregation plan required that no school in the district be comprised of a majority of minority students. In 1974, the Pasadena School Board petitioned the Court for one of two actions: Either it approve a new plan, on the contention that the old plan had been completed, or the Court relinquish jurisdiction of the case. Plaintiffs opposed both requests. They claimed that school officials had satisfied the "no school comprised of a majority of minority students" criterion in only one year--1970. School officials, however, protested that after 1970 the criterion was not met because of changing residential patterns in the city and not because of school board policy. The district court ruled in favor of the plaintiffs--student assignments should be adjusted on a year-to-year basis. The decision was affirmed by the court of appeals.

After granting review of the case the Supreme Court vacated the district court order and remanded the case for further consideration. Speaking for the Court, Justice William Rehnquist stated:

Having once implemented a racially neutral attendance pattern in order to remedy the perceived constitutional violations . . . the District Court had fully performed its function of providing the appropriate remedy for previous racially discriminatory patterns (Pasadena City Board of Education v. Spangler, 1976: 436-437).

In sum, Court policy concerning resegregation much like those concerning metropolitan plans, busing, and white flight, is still largely undefined and is developing on a case-by-case incremental basis. Until the Supreme Court provides firm, clear guidelines on these four important desegregation issues, school officials and lower courts will continue to grapple with the difficult task of devising effective, equitable, and long-lasting desegregation strategies.

Summary

The purpose of this chapter was to trace the evolution of public school desegregation efforts from a historical/legal perspective. Historically, federal courts and in particular the Supreme Court as the highest court of the land have been levied with the unenviable job of developing a national school desegregation policy. And while the history of school desegregation is studded with notable decisions--Brown I and II, Green, Swann, Keyes--"the promise of Brown remains unfulfilled for many students. In the 1978-79 school year, 6,218,024 minority students (60.2%) attended schools that were at least 50 percent minority, and 37 percent attended schools that were at least 80 percent minority" (U.S. Commission on Civil Rights, 1981: 31).

In short, school desegregation efforts are not over. Additional guidance is required from the Supreme Court detailing the uses and limitations of busing and metropolitan plans as desegregation strategies. Court clarification is also needed concerning the weight white flight evidence should be given in formulating desegregation techniques and the evidence lower courts should examine in considering resegregation law suits.

While the courts and the enforcement activities of the Office of Civil Rights have played a major role in setting school desegregation policy and have forced some school districts to desegregate, "explaining desegregation change by referring to only federal pressure is not sufficient" (Morgan and Fitzgerald, 1980: 197). As a U.S. Commission on Civil Rights (1976) survey of 1,300 districts reveals, approximately 37 percent of districts desegregating did so under state or local initiative. And even in those districts where there is federal coercion to desegregate, a host of local environmental factors may also influence the level and spirit of compliance. Chapter 2 is devoted to developing a theoretical framework which facilitates the understanding of the dynamics of school desegregation as a public policy/process.

NOTES

1. According to Hawley (1981: 146) there are five primary objectives of school desegregation: (1) ending racial isolation among and within schools; (2) increasing racial tolerance and understanding among children and adults of all races; (3) improving the academic performance of low achievers; (4) enhancing the self-concept and aspirations to achieve among minorities; (5) increasing social equality through increased access for minorities to higher education, higher status jobs, and higher incomes. Achievement of these objectives, so it is argued, will hopefully lead to the ultimate goal of school desegregation and civil rights legislation per se, integration--a condition where minority groups are accepted on a completely equal basis (Pettigrew, 1971). The scope of this study only allows investigation of two desegregation outcomes--the degree to which school districts are successful in reducing racial isolation among schools and explaining an unintended outcome of desegregation efforts, white enrollment decline.
2. In tracing the chronology of important court cases as well as gathering factual information about the various cases, four references were extensively employed--Polsby, 1977; Read, 1977; Von Euler and Parham, 1978; and Gotttron, 1979.

3. The Slaughterhouse Cases were originated by a group of New Orleans butchers in response to a Louisiana law granting one company the exclusive right to operate a slaughterhouse in New Orleans.
4. The Supreme Court ruled on five separate cases collectively in the Civil Rights Cases: United States v. Stanley (Kansas); United States v. Ryan (California); United States v. Nichols (Missouri); United States v. Singleton (New York); and Robinson v. Memphis and Charleston Railroad Co. (Tennessee).
5. In Scott v. Sandford (1857) a black slave in Missouri named Dred Scott claimed that because of his trip to Illinois and other states where blacks were viewed as "free men," he was no longer a slave. The Supreme Court, under Chief Justice Tanney, ruled 7 to 2 against Scott. Tanney's opinion was:

. . . they [slaves] are not, and that they are not included and were not intended to be included, under the word 'citizens' in the Constitution, and can, therefore, claim none of the rights and privileges which that instrument provides for and serves to citizens of the United States (Scott v. Sanford, 1857: 404).

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6. The 1966 desegregation guidelines proposed by the Office of Education of the U.S. Department of Health, Education, and Welfare under Title VI of the Civil Rights Act of 1964 required:
 1. Substantial achievements under free choice desegregation plans,
 2. Significant progress in desegregation of teachers and staff,
 3. Progress in closing of small, inadequate schools established for Negro students or other minority groups,
 4. Simplified procedures and periodic reports from school districts to measure progress in implementing desegregation plans (Blaustein and Zangrando, 1968: 590).

In addition, each school system was responsible for selecting the plan best suited to accomplish desegregation as quickly as possible and making its plan work. On December 29, 1966, the Fifth Circuit Court in United States v. Jefferson County Board of Education upheld the constitutionality of the HEW guidelines.

7. South equals the 11 states of the original Confederacy: Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia.
8. This percentage was interpolated from Figure 1.

CHAPTER II

THEORETICAL FRAMEWORK

Introduction

In a recently completed comprehensive study of school desegregation, Robert Crain and Willis Hawley, two of the nation's preeminent desegregation scholars, set forth an agenda for future school desegregation research. According to Crain and Hawley (1981: 1, 5) in order that social science research may be converted into action in the "real world": (1) "research aimed at influencing policy needs to be developed and presented with policy makers and practitioners as the consumers"; (2) research should attempt to capture the complexity of the desegregation process as well as the factors (determinants) that affect different types of desegregation outcomes; and (3) theory should "guide research design and analysis."

The rationale for this research agenda is based on three characteristics of the desegregation literature. First, "technically sophisticated research is [usually] designed and conducted by persons who see other researchers [and not policy makers] as the most significant judges of their work" (Crain and Hawley, 1981: 1). Second, almost without exception desegregation scholars study school desegregation

following one or two approaches: they describe the process of desegregation implementation (case studies), or they attempt to systematically identify those factors affecting desegregation success (comparative studies), but not both. Third, most desegregation studies are marked by their "virtual absence of relatively comprehensive conceptual and theoretical frameworks" (Crain and Hawley, 1981: 5).

The present study attempts to address Crain and Hawley's research agenda in three ways. First, in order to provide policy makers with information regarding the effectiveness of various desegregation techniques in reducing racial isolation, the range of desegregation strategies used across 52 large school districts is systematically determined, commonly employed strategies by school level (elementary and secondary) are identified, and the relationship of the techniques with desegregation success is assessed (see Chapter 4). Second, an attempt is made to systematically identify those factors that affect school desegregation implementation and white student enrollment decline (see Chapters 5 and 6). Finally, while no grand theory of school desegregation is offered, the research is placed within the context of implementation theory.

The purpose of this chapter is to present the conceptual framework employed to guide the research design and analysis. In section one school desegregation as a policy implementation process is discussed, and the types of factors which may influence the implementation process are identified. A critical appraisal of previous efforts to explain school desegregation is presented in section two. Finally, in the third section a desegregation implementation research model is

offered, proposed relationships are discussed, and a methodology that will facilitate empirical testing of the model is offered.

Implementing School Desegregation Policy

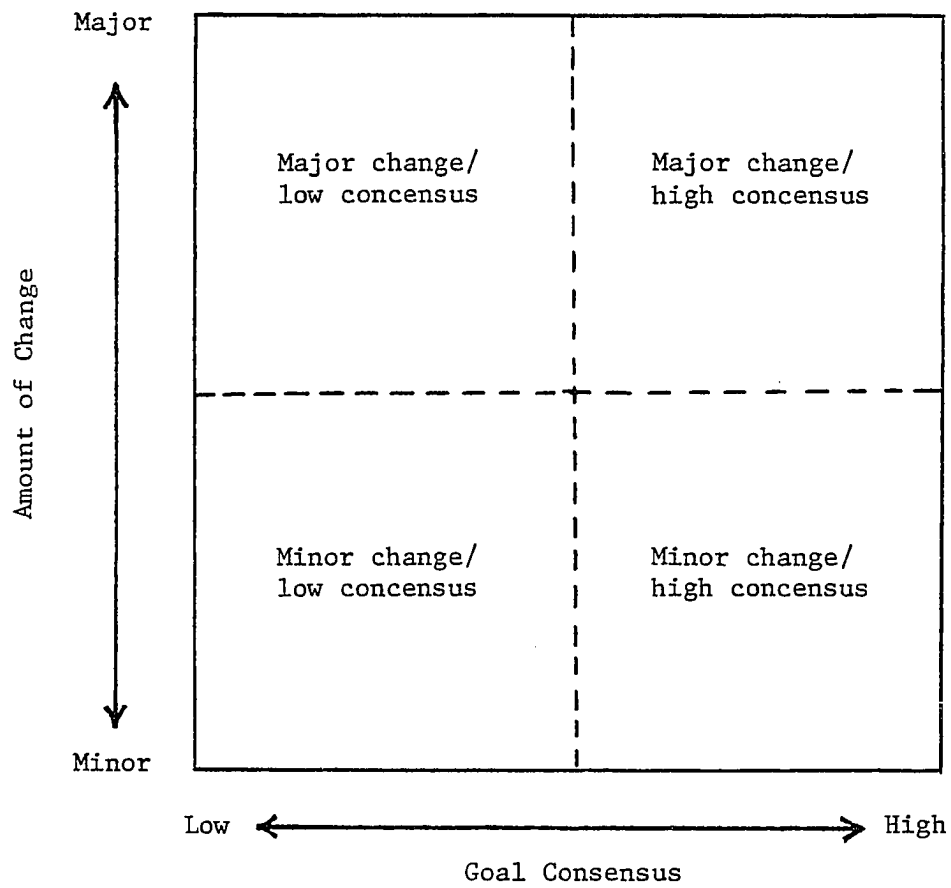
"The history of efforts to combat segregation in America has been one of raising the level at which decisions [are] made" (Altshuler, 1970: 20). Such is the case with efforts to desegregate American public schools, for it was the Supreme Court in 1954 that established the dismantling of dual school systems as a national public policy. But as with any policy, implementation and compliance are required before the intent of a policy becomes a reality.

Van Meter and Van Horn (1975: 458) suggest that implementation success is contingent upon the type of policy to be implemented. They classify policies according to two distinguishing characteristics: "the amount of change involved and the extent to which there is goal consensus among the participants in the implementations process" (see Figure 2). According to the researchers, of the four types of policies shown in Figure 2, policies of the "major change/low consensus" variety are the most difficult to implement since they require extensive change without normative commitment to the goals of the policy.

School desegregation policy is of the "major change/low consensus" type. School desegregation required major change; it upset a way of life, a traditional view of the relationship between people based on race. Blacks (and other minorities) simply should not attend local white schools. As a result school desegregation efforts are:

FIGURE 2

DIMENSIONS OF POLICY AFFECTING IMPLEMENTATION



SOURCE: Van Meter and Van Horn (1975: 460).

. . . rife with examples of the nonimplementation of judicial orders and executive decisions, of the failure to carry out policies of effective desegregation at the community, school system, building, and classroom levels. Even the best administrative rhetoric and policy seldom is translated into effective programs at the local school level. We see examples of nonimplementation, and of resistance to racial and educational change, written in bold relief across the past 25 years of national history. They can be identified in the southern "massive resistance" of the 1950s and early 1960s and the northern "passive resistance" of the late 1960s and 1970s; in attempts at compliance with the letter but not the spirit of federal laws and judicial orders; in white flight, fright, and fight; in constant delay, dismay, and decay; and in the ways innovative desegregation programs and educational leaders have been ignored, sabotaged, coopted, or even fired and assassinated in character or person (Crowfoot and Chesler, 1981: 275).

If Van Meter and Van Horn's (1975; also see Yudof, 1981: 252) contention is true that successful implementation depends upon consensus or at least acquiescence on a policy, then the nonimplementation of school desegregation orders should have come as little surprise. For as Cataldo, et al. (1978: xiv-xv) remind us:

School desegregation involves ordinary citizens as key policy actors to a far greater extent than most public issues. The outcome of school desegregation relies on compliance with the law. For officials compliance is mandatory; for citizens it is voluntary. The facts of a particular desegregation case may result in a decision requiring the school board to desegregate. The board then has no legal choice but to respond affirmatively. Citizens, however, may respond in ways extending beyond the coercive power of the law. People who live in a desegregated district are not required to remain there or to enroll their children in the public schools, but only to send their children to some school or to provide an equivalent educational opportunity. It is difficult to think of a more important or far-reaching policy issue in which the ability of citizens has been greater to avoid the law without breaking it. Citizens may avoid desegregation through the entirely legitimate expedients of making a residential move or choosing the private school alternative.

In sum, the Supreme Court's desegregation mandate was not perceived by many as a legitimate exercise of judicial power. Southern reaction, the only region of the nation initially affected by Brown, was generally unfavorable. Thus, in order to implement desegregation policy, coercion was required. In fact, Rodgers and Bullock (1976a) characterize desegregation implementation as a process of "coercion to compliance." Before reviewing the various approaches employed to implement desegregation policy, a brief introduction to implementation theory is presented.

Implementation Theory

The study of public policy has shifted from a focus on policy formulation and enactment to the implementation of policy. The rationale for this change of focus is relatively straightforward; there may be considerable slippage between policy outputs and policy impacts (see Nachmias, 1979: 3). Or, as Dye notes, "No longer do we assume that once we pass a law, establish a bureaucracy, and spend money, . . . the purpose of these acts will be achieved and the results will be what we expect them to be (Dye, 1976: 95).

Implementation theory is still in the developmental stage. In fact, Van Meter and Van Horn (1975: 449) state that "at present we know relatively little about the process of policy implementation." In the past few years, however, efforts to provide conceptual frameworks to guide the study of the policy implementation process have been made. Bardach (1977: 40) attributes the earliest attempt to "conceptualize the 'implementation process' as a distinctive social and political

phenomenon" to Bunker (1972). Bunker characterized the implementation process as occurring in a three dimensional space defined by issue salience, power resources, and agreement. In order to achieve successful implementation, the "massing of assent" among key actors is required.

Based upon a review of three general bodies of literature--organizational theory (e.g., Kaufman, 1971; Etzioni, 1964), judicial impact studies (e.g., Krislov, 1965; Dolbeare and Hammond, 1971), and studies of intergovernmental relations (e.g., Bailey and Mosher, 1968; Pressman and Wildavsky, 1973), Van Meter and Van Horn (1975: 463) have developed a model that identifies six types of factors that may affect implementation success. The six factors include: policy standards and objectives; policy resources; interorganizational communication and enforcement activities; characteristics of the implementing agencies; economic, social, and political conditions; and the disposition of implementors. While the authors acknowledge that their "model is relatively complex," they argue that "an examination of its several linkages will lead to more systematic explanations of policy performance. . . . assuming satisfactory indicators [can] be constructed and appropriate data collected" (Van Meter and Van Horn, 1975: 478, 462).

Sabatier and Mazmanian (1980: 540) are critical of Van Meter and Van Horn's implementation framework. They state the framework "suffers from some of the traditional defects of abstract systems models. Many of the factors in [the] 'model,' while useful in orienting one's thinking, are essentially amorphous categories rather than variables that can be easily operationalized." Sabatier and Mazmanian (1980: 540) argue that "second-generation" implementation frameworks should:

(1) place more of an emphasis on "exploring the linkage between individual behavior and the political, economic, and legal context in which it occurs," (2) consider the capacity of a statute to determine the actors involved in the implementation process and the "probable policy predispositions of implementation officials," and (3) address the "'tractability' or solvability of the problem(s) addressed by a public policy."

Pressman and Wildavsky's (1973) analysis of the Economic Development Administration's (EDA) employment effort in Oakland is perhaps one of the best known case studies detailing the complexity of the policy implementation process. According to Pressman and Wildavsky (1973: xv):

Policies imply theories. Whether stated explicitly or not, policies point to a chain of causation between initial conditions and future consequences. If X, then Y. Policies become programs when, by authoritative action, the initial conditions are created. X now exists. Programs make the theories operational by forgoing the first link in the causal chain connecting actions to objectives. Given X, we act to obtain Y. Implementation, then, is the ability to forge subsequent links in the causal chain so as to obtain the desired results.

The authors note, however, that three factors may create "knots" in this causal chain and impede implementation success: multiplicity of participants, multiplicity of perspectives, and multiplicity of decision points. These problems are especially troublesome in implementing school desegregation policy. A complex cast of actors defines the desegregation milieu, and each group of actors may view desegregation from a different perspective. For example, the courts are charged with the responsibility of making sure the letter of the

law as espoused in Brown is realized. Federal bureaucracies are responsible for judging the adequacy of local plans and based on their evaluation either granting or withholding federal monies. Local school officials are responsible for the formulation and/or implementation of desegregation orders within the classroom. Finally, parents are responsible for the safety of their children and securing for them a "quality education." The "Achilles Heel" of desegregation implementation is that the values held by one group of actors may not coincide with those held by another group. School officials attuned to the "general will" of the populace or community elites may resist desegregation efforts and resort to delaying tactics in implementing court imposed desegregation orders. Desegregation thus becomes a political process, a process where values are authoritatively imposed and compliance is forced.

Crowfoot and Chesler (1981: 227-291) have identified four specific desegregation related implementation problems--problems of mission, power, structure, and resources. Problems of mission primarily concern the role and purpose of education. From a broad normative perspective our educational system can be viewed either "as an instrument of mass democracy, as a way of freeing all our people from the constraining limitations of social birth and background," or as an "instrument of continuing elite rule, as a covert way of channeling and maintaining inequities of birth across succeeding generations" (Crowfoot and Chesler, 1981: 277). At a more micro level, educational professionals may view the educational process from different perspectives--from a strong emphasis on teaching basic skills, to keeping youth off the streets, to institutionalizing innovative and novel

teaching methods. School desegregation produces a new "mix" of students and teachers. And competing cultural values as well as conflicting ideas about the purpose of education are likely to emerge in this new more heterogeneous population.

School desegregation is a racial as well as an educational process. Thus, community racial attitudes and local power structures may affect desegregation implementation. Historically, local school systems have been largely controlled by community elites. These community elites "typically represent the dominant coalition in school boards and other groups that have substantial power to decide on school policies. . . . Segregation has resulted from well-organized groups exerting their will on school policies" (Crowfoot and Chesler, 1981: 280).

The third school desegregation-related implementation problem identified by Crowfoot and Chesler (1981: 285-286) is structure:

The school organization is a highly complex and differentiated structure, with many different hierarchical levels. In the case of authoritative decisions, for instance, the decision must pass from the school board to the local superintendent, to central office staffs, to principals, to teachers, to its final impact on students. At each step a policy decision may be reinterpreted and modified, implemented or not implemented. Furthermore, the number of steps in this command system blurs the responsibility for carrying out official orders.

As a result, remedial actions required to correct implementation problems are difficult to formulate since the source of or level at which non-compliance is occurring is hard to isolate.

Finally, "many observers of school desegregation processes indicate that educators and communities do not have the requisite

resources to make a success of desegregation. Money, good will, energy, materials, personnel, and skill are all part of the resource base that often is lacking" (Crowfoot and Chesler, 1981: 289). Without appropriate resources, both fiscal and human, school desegregation may be viewed as merely "symbolic," a policy that serves only to placate those denied equal educational opportunities. Given these problems in implementing school desegregation as a public policy, a brief review of approaches employed to effectuate school desegregation is appropriate.

Implementation Approaches

Several approaches to foster compliance and implement school desegregation policy are available. Yudof (1981) identifies four approaches. The first approach is labelled organizational development and is typical of the initial strategy followed to implement the Brown decision. Rather than a strong emphasis on coercion, the organizational development approach was based on consensus and a normative commitment to school desegregation. A "bottom-up" strategy which required cooperation among key policy makers such as judges, lawyers, interest groups, and local school officials was viewed as the appropriate strategy for achieving school desegregation. Unfortunately, the approach proved only slightly productive in reducing racial isolation. General citizen disapproval of the school desegregation process was too strong. Local school officials as well as many southern judges simply did not have the will to challenge overt community resistance.

The passage of the Civil Rights Act of 1964 ushered in a new approach to school desegregation implementation--systems management.

The systems management approach was aimed at achieving one primary goal, the mixing of races in local schools. No longer was the goal to create a consensus among key policy makers; "goal-directed behavior, accountability, strategic planning, and decision rules" became the key words of the day (Yudof, 1981: 252-253). In order to reduce racial isolation, a "top-down" strategy was followed. Pursuant to the Civil Rights Act of 1964 a federal bureaucracy was created in the Department of Health, Education and Welfare to formulate desegregation guidelines, file discrimination suits on behalf of litigants, and evaluate the adequacy of local desegregation plans. The bureaucracy had the power to withhold federal monies if school districts failed to comply with desegregation orders. In 1965 and 1966, the Fifth Circuit Court of Appeals handed down a series of decisions that required southern school districts to follow HEW guidelines when formulating desegregation plans. Finally, in 1968, the Supreme Court in Green declared that "freedom-of-choice" as a desegregation strategy was generally unacceptable; school boards were ordered to develop plans that resulted in redefining the racial composition of schools and were ordered to develop plans that promised to work immediately. This top-down approach to school desegregation was based to a large degree on coercion. Noncompliance could result in loss of financial resources, court-imposed desegregation plans, a court appointed consultant to formulate a plan, and/or the issuing of contempt of court charges against local school officials.

The systems management approach was instrumental in breaking down entrenched southern school desegregation resistance and was successful in achieving one of the basic goals of school desegregation,

racial balancing (the letter of the law). But the approach, which is a commonly employed strategy followed by the courts today, falls short in facilitating the achievement of more nebulous goals such as improving race relations or facilitating within-school desegregation (the spirit of the law).

Overlapping systems management was another implementation approach--bureaucratic processes. This approach is based on the premise that judges act as political referees and possess considerable discretionary power. For example, with its decision in Swann (1971), the Supreme Court began to place a heavier emphasis on the remedial powers of lower court judges and advanced the notion that different local conditions may require different types of remedies. Yudof (1981: 257) suggests that because of the discretionary power of the Court, "tremendous variation in remedies in factually indistinguishable circumstances" has resulted.

Nakamura and Smallwood (1980: 99-100) highlight the discretionary power lower court judges may exercise in implementing school desegregation policy. They compare the approach taken by Judge Weigel in San Francisco and Judge Garrity in Boston. Judge Weigel "left implementation in the hands of those formally charged with the responsibility for running the school system" (p. 99). In contrast, Judge Garrity created a special Department of Implementation in Boston that was directly accountable to the Court. "In effect, Judge Garrity and his appointees became both the desegregation policy-makers and implementors for the Boston schools" (p. 100).

The application of the bureaucratic processes model is perhaps best typified with respect to court rulings on metropolitan desegregation plans. In Milliken v. Bradley (1974: 738) the Court ruled that "the nature of the violation determines the scope of the remedy." The courts, therefore, have considerable latitude in tailoring and requiring plans that fit local conditions and perceived inequities.

The final approach to implement school desegregation is conflict and bargaining. Instead of a top-down process where decisions are made at higher levels and forced upon sub-national actors, the conflict and bargaining model assumes that:

A series of complex bargains is a manifestation of the implementation process, and no single set of purposes and no single definition of success is adopted. The process is one of mutual adjustment, as the parties bargain within legal constraints (Yudof, 1981: 257).

The process of implementation is largely incremental in nature as desegregation actors struggle to achieve school desegregation through a series of bargains and compromises.

Summary

In order for school desegregation to be realized a conversion process must take place, a policy must be implemented. And implementing school desegregation policy is not an easy task. The nature of the policy--major change/low consensus--impedes policy goal success. The review of general factors associated with policy implementation as well as the discussion of four specific approaches followed to implement school desegregation policy suggests that three types of influences may bear directly upon desegregation success. First, Van Meter and

Van Horn (1975: 466) suggest that "successful implementation often requires institutional mechanisms and procedures whereby higher authorities . . . may increase the likelihood that implementors . . . will act in a manner consistent with a policy's standard and objectives." In other words, "incentives to promote compliance with policy decisions" are often required (Sabatier and Mazmanian, 1980: 540). Yudof's (1981) review of approaches to implement school desegregation policy found that after early attempts to develop a normative commitment to the school desegregation process failed, incentives to desegregate came in the form of coercion, both from the Office of Civil Rights through enforcement activities and from the courts. This "top-down" strategy was successful in achieving the first goal of school desegregation--eliminating dual school systems in the South. Thus, extralocal pressure may be considered one of the primary factors affecting school desegregation implementation efforts.

Second, Yudof (1981) suggests that after Swann, the Supreme Court as well as lower courts began to consider with increasing frequency local environmental conditions when formulating desegregation strategies. In Sabatier's and Mazmanian's (1980: 541) words, the "tractability" or solvability of the school desegregation process came to the forefront: Different local conditions could require different types of remedies. School districts differ in size, organizational structure, percentage of minority students, etc. In short, school district characteristics may affect desegregation implementation.

Finally, Van Meter and Van Horn (1975), Sabatier and Mazmanian (1980), and Yudof (1981) suggest that general public opinion

and implementor attitudes may impinge upon the implementation process. For example, Van Meter and Van Horn (1975: 472) find that implementation may be affected by:

- (1) the extent to which social conditions are affected by the implementation of a policy;
- (2) the nature of public opinion and the saliency of a policy issue;
- (3) the extent to which private interest groups mobilize in support or opposition to a policy;
- (4) whether local elites favor or oppose policy implementation; and
- (5) opposition or support for a policy on the part of policy implementors.

Similarly, Sabatier and Mazmanian (1980: 542) delineate several "non-statutory" variables related to the implementation process: media attention, public support, attitudes and resources of constituency groups, and commitment and leadership skill of implementing officials.

With respect to school desegregation, these influences identified by Van Meter and Van Horn (1975) and Sabatier and Mazmanian (1980) might be viewed as "mediating" or "process" variables. That is, given external and school district constraints, desegregation actors such as school officials (desegregation implementors), community elites (media, interest groups), and the general public at large must struggle to implement school desegregation through a series of bargains and compromises (Yudof, 1981).

In sum, implementing school desegregation policy is a complex process. And this review of the implementation literature suggests that a number of factors may affect the process. Specifically, external pressure in the form of coercion, local environmental influences, and community and elite reaction may help define implementation success. A number of desegregation studies have attempted to describe or explain the relationship between these factors and desegregation success. The following section provides a critical assessment of these studies.

The Desegregation Literature: A Critical Appraisal

The school desegregation literature primarily consists of two types of studies: case studies¹ and comparative analyses. "A case study is an in-depth examination of a particular instance of something. This is in contrast to an aggregation of characteristics of many instances" (Hofferbert, 1974: 89). While both types of studies enhance our understanding of school desegregation efforts, singularly neither approach adequately captures the complexity of the desegregation process.

Case Studies

According to Rist (1979: 6-7) "the mosaic of school desegregation in the United States confounds efforts at grand generalization." He argues that to a large degree desegregation studies "have not been grounded in the analysis of the day-to-day working out of school desegregation." As a remedy, Rist advocates the use of case studies to capture the "realities" of school desegregation implementation.

Social scientists have performed case studies for years. In fact, Edwards (1980: 7) notes that "most implementation studies have been of the case study variety." The primary purpose of a case study is to describe a phenomenon or event. The typical desegregation case study provides some or all of the following types of information:

- o the stimulus for the initiation of local desegregation actions;
- o a historical account of desegregation litigation and race relations in the district;
- o a description of the local socioeconomic environment;
- o school board, local elite, black and white community reaction to desegregation efforts;
- o an assessment of what happened as a result of desegregation action.

The major advantage of the case study lies in its richness of detail (Labovitz and Hagedorn, 1976: 79). The major limitation of the case study is inherent in the approach itself, "it is logically invalid to generalize on the basis of a particular case" (Garson, 1971: 70). Nevertheless, case studies are particularly useful in suggesting hypotheses for further research (Nachmias and Nachmias, 1976: 42). For example, after reviewing the effects of nine demographic, socioeconomic, and political variables² on school desegregation across 27 desegregation case studies,³ Fitzgerald (1975: 35-39) suggests that several tentative propositions emerge from a review of the case study literature.

- o The single most important factor explaining school desegregation is the local school board. Assertive school boards facilitate the desegregation process, weak school boards impede progress.
- o School superintendents play a similar role; if they exert leadership, desegregation success is enhanced.
- o Other factors which facilitate desegregation progress include: supportive political and local elites, favorable communitywide attitudes, black activism, and extra-local pressure.
- o Factors impeding desegregation success are: a hostile local climate, a large black population or school enrollment, low community social status, and community residential segregation.

Fitzgerald (1975: 87, 39) notes, however, that "cumulatively they [the case studies] fail to provide reliable, systematic, generalizable information concerning public school desegregation across the United States. . . . [E]ach of the nine factors needs to be taken out of the case study context which has made a preliminary determination of its utility and subjected to the more rigorous test of systematic comparative inquiry."

Comparative Studies

In contrast to the case study where the basic goal is to describe the school desegregation implementation process, a comparative desegregation study attempts to explain desegregation success. A

comparative approach to the study of political phenomena has its roots in the "behavioral" (scientific movement) that developed following World War II (see Charlesworth, 1967). As applied to school desegregation, a comparative study attempts to test hypotheses and discover patterned regularities among a group of cases (school districts); an attempt is made to identify those factors (determinants) that impede or facilitate desegregation success.

Three types of variables related to school desegregation emerge from comparative analyses: community and school district characteristics, local political influences, and extralocal pressure. With respect to community and school district characteristics, previous research suggests, for example, that residential segregation (Farley, 1975b; Taeuber, 1979), large proportions of black pupils (Dye, 1968; Farley, 1975a), and a large school enrollment (Giles, 1975a; Giles and Walker, 1975; Coleman, 1976), impede desegregation progress. In addition to these community and school district influences, local political structure and climate may affect desegregation efforts. For example, supportive local elite attitudes (Kirby, et al., 1973), lack of public opposition to desegregation (Rodgers and Bullock, 1976a), insulated school boards (Crain and Vanecko, 1968; Dye, 1968), and the hiring of a new school superintendent (Rodgers and Bullock, 1976a) have been found to enhance desegregation success. Finally, the significant impact of federal pressure on the desegregation process, especially in the South, has been well documented (see Farley, 1975a; Giles, 1975a; Fitzgerald, 1975; Rodgers, 1974-75; Rodgers and Bullock, 1976a, 1976b; Fitzgerald and Morgan, 1977b; Morgan and Fitzgerald, 1980).

Critical Assessment of the Literature

While case studies provide rich detail about the process of implementing school desegregation policy, "case studies of implementation have not systematically identified or analyzed the factors that are critical in the implementation of public policy" (Edwards, 1980: 7). Rather, findings are impressionistic, speculative, and idiosyncratic. In contrast, a comparative aggregate approach to the study of school desegregation facilitates the systematic identification and analysis of factors that may affect school desegregation, but for the most part comparative studies have failed to capture the complexity of the desegregation implementation process (Crain and Hawley, 1981: 5). An example will illustrate this point.

Fitzgerald's (1975) comparative analysis of desegregation change in 205 U.S. cities between the years 1968 and 1972 is one of the most theoretically sound attempts to explain public school desegregation. Based on a "penetrated systems framework" (see Figure 3), Fitzgerald conceptualized the school desegregation implementation process as being affected by five components: federal, state, local environmental, local political, and local school influences. And while Fitzgerald's modelling efforts should be applauded, since most comparative studies are not based upon relatively comprehensive conceptual frameworks" (Crain and Hawley, 1981: 5), his research effort is deficient in two important respects. First, many of the 205 school districts included in the analysis did not formally initiate desegregation efforts during the 1968-1972 time span (for example, Denver, Baltimore, Boston, Lansing, Omaha, Dallas, Houston, Milwaukee, Racine, etc.). Thus, Fitzgerald's

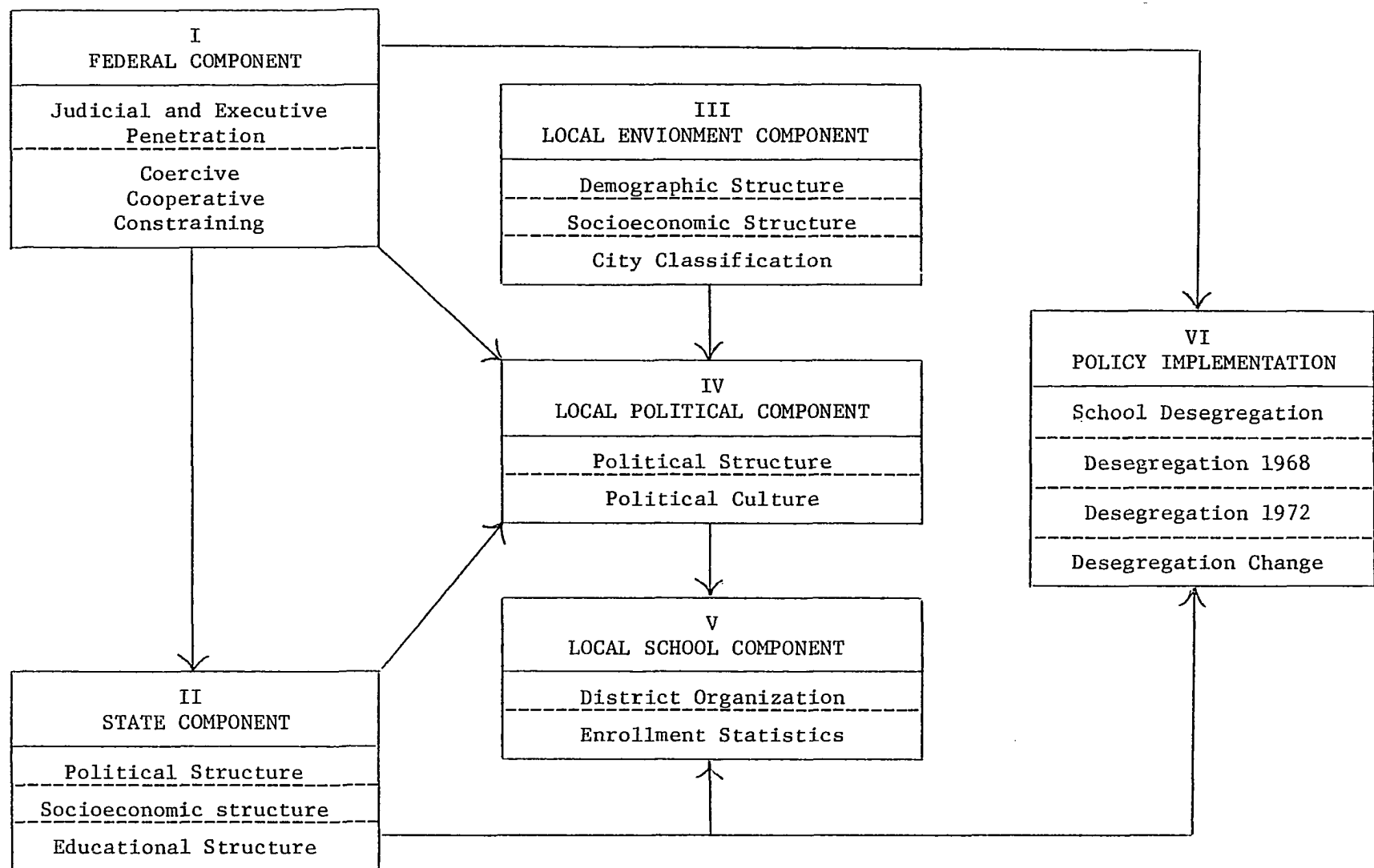


FIGURE 3. FITZGERALD'S PENETRATION SYSTEMS MODEL

Source: Fitzgerald, 1975: 138.

dependent variable which he calls "policy implementation" (see Figure 3, Block VI), is actually comprised of two separate dimensions, racial mix that occurred or did not occur as a result of planned desegregation and racial mix that occurred or did not occur for reasons other than planned change. Crain and Hawley (1981: 7-8) discuss the importance of keeping the two dimensions conceptually separate:

It is important to note that much of the research that asserts that it is about desegregation is about racially mixed schools and we do not know whether the racial mix was the consequence of planned desegregation. Indeed many of the best known studies (Coleman, et al., 1966; St. John, 1975) do not distinguish between formal desegregation and otherwise racially mixed schools. Desegregation is an identifiable social process that has a particular starting point and carries with it, in one measure or another, assumptions that change is required or desirable. To consider the experiences children, teachers and parents have in such a process to be the same as those they have in schools 'integrated' because of residential patterns or school district consolidation is a precarious assumption.

In brief, if one is interested in explaining the school desegregation implementation process, cases included for analysis should be limited to those actually involved in implementing a local school desegregation plan.

Second, despite Fitzgerald's inclusion of three blocks of "local components" that are hypothesized to affect desegregation implementation, and over 70 indicators used to measure these influences, those factors that desegregation case studies specifically suggest affect desegregation implementation are not included for analysis. For example, indicators of superintendent and school board desegregation support, citizen participation in the desegregation process, desegregation resistance, and community elite attitudes are absent. In addition,

the effects that various desegregation strategies employed in school districts have on desegregation success are not tested.

The omission of these variables, however, can be understood on two accounts. First, traditional or standard data sources (e.g., U.S. Bureau of the Census, Office of Civil Rights) simply do not provide such data. Second, "most comparative studies . . . [provide] little or no information as to which features of a desegregation plan can be manipulated in order to minimize negative effects and maximize positive effects" (Rossell, 1978b: 158). Rossell (1978b: 162-177) also insists that white community attitudes and perhaps protest actions and leadership statements can affect desegregation implementation. Once again few comparative studies tap these potential influences (see for example, Dye, 1968; Farley, 1975a; Fitzgerald and Morgan, 1977b; Morgan and Fitzgerald, 1980). In short, the second criticism of the Fitzgerald model can be generalized to most comparative studies, but not all.

Perhaps the most notable exception is Rodgers and Bullock's (1976a) study of school desegregation compliance in 31 Georgia school districts. In this study the authors argue that school desegregation implementation can best be understood using cost-benefit/compliance theory. They state:

Citizens obey most laws because they perceive that the utilities of compliance outweigh the utilities of non-compliance. However, when citizens perceive that the utilities of the situation favor disobedience, they break the law (Rodgers and Bullock, 1976a: 3).

Within the context of a cost-benefit interpretation of compliance, Rodgers and Bullock proceed to determine the predictors of school desegregation change (see Chapter 3). Using 1965-66 to 1973-74 desegregation change measures the authors test five hypotheses:

- H₁ Progress in school desegregation was influenced by federal action.
- H₂ Progress in school desegregation was associated with black pressure for compliance.
- H₃ Progress in school desegregation was not impeded by organized white opposition.
- H₄ The establishment of a private, segregated school was associated with progress in school desegregation.
- H₅ School superintendent change was associated with progress in school desegregation (Rodgers and Bullock, 1976: 37-40).

The results of their analyses support hypothesis one, three, and five. Contrary to expectations "black activity proved to be an indication of segregation rather than desegregation" (hypothesis 2; p. 41) and "private schools were associated with segregation rather than desegregation" (hypothesis 4; p. 43). Rodgers and Bullock (1976a: 44) conclude:

Our findings yield support for a cost/benefit theory of compliance. School officials obeyed desegregation edicts only when the costs of noncompliance became high enough to outweigh other considerations. Change primarily occurred when federal coercion created pressures severe enough to compel desegregation. As one of our respondents said: 'We did just enough to stay out of jail. That's why segregation lasted so long.'

Rodgers and Bullock's contribution to the study of school desegregation is not limited to their research findings. In fact, the importance of their study transcends research findings in two ways. First, the authors develop a broad, integrative conceptual framework

for understanding the school desegregation process (compliance theory). Second, the authors include in a comparative research design variables whose relationship with desegregation success had only been speculatively examined in case studies (black activism and organized white opposition). Rodgers and Bullock, therefore, were able to bridge the gap between what had previously been two disparate approaches to the study of school desegregation--case studies describing influences that may affect desegregation implementation and comparative studies systematically isolating the determinants of desegregation success.

The present study is based on the assumption that in order to understand more adequately the school desegregation implementation process, the research approach followed by Rodgers and Bullock is required. That is, those variables that desegregation case studies and aggregate analyses suggest may affect desegregation implementation should be included in a comparative research design and their effects systematically examined.

Explaining School Desegregation: An Implementation Perspective

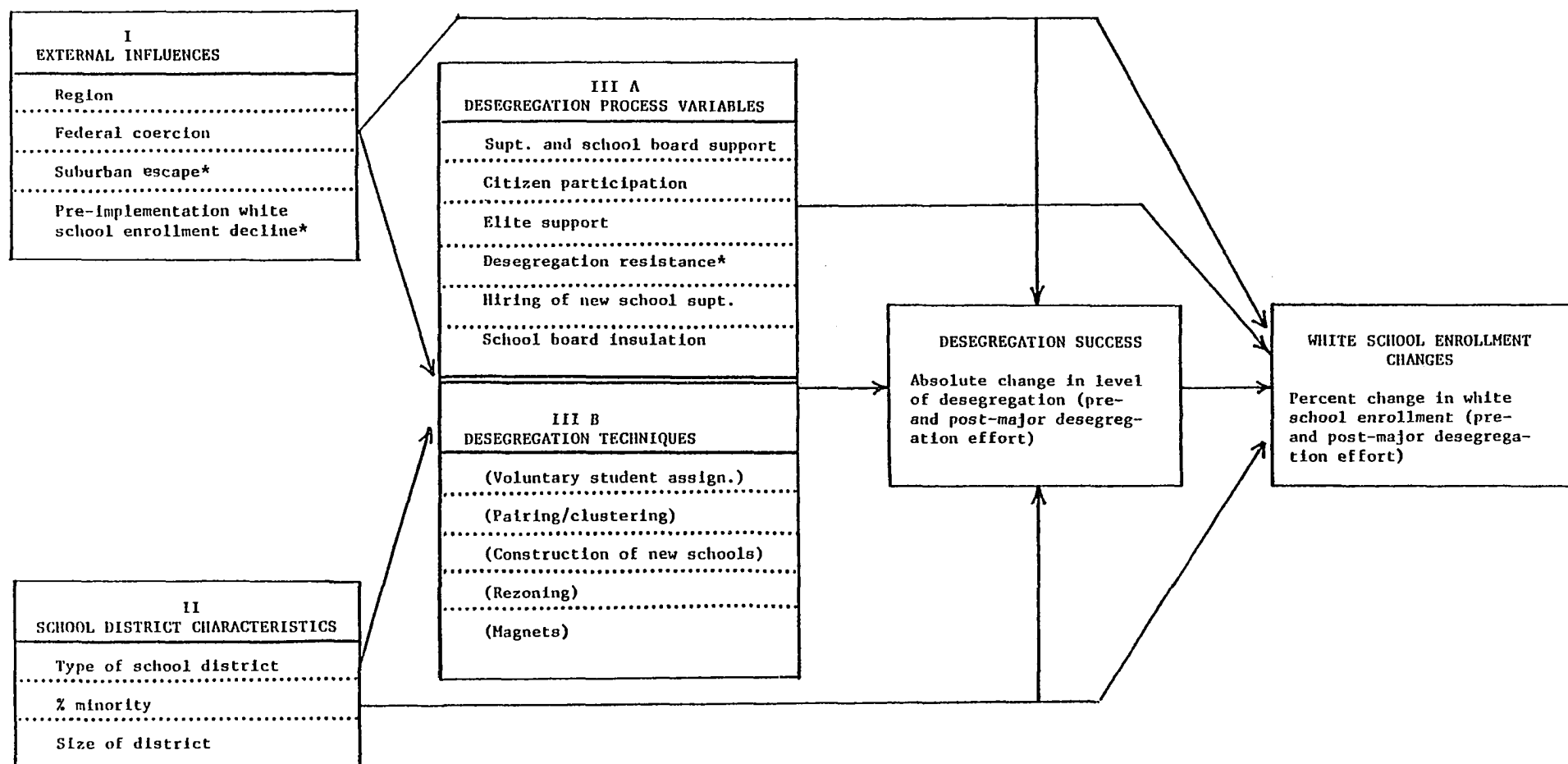
As discussed above, for the most part previous desegregation research has failed to capture the complexity of the desegregation process. Comparative analyses have focused primarily on the impact that federal coercion and school district characteristics have on desegregation success. Desegregation case studies on the other hand detail the process of implementing school desegregation policy in school district X or Y, but the independent effects of those variables which case studies suggest affect desegregation implementation remain

tentatively defined. A primary purpose of this study is to develop a research framework that will allow for the systematic, comparative analysis of variables that both previous case and aggregate studies suggest bear directly upon desegregation success.

Previous desegregation research as well as the implementation literature reviewed above suggests that school desegregation success may be affected by three types of general influences: external factors, school district characteristics, and a group of variables referred to here as desegregation process variables (implementor attitudes, community and elite attitudes). Figure 4 depicts the relationships among these fundamental forces and shows the indicators used to measure each type of influence.

The diagram suggests that two principal exogenous influences provide the impetus for desegregation action: (1) external pressure or conditions and (2) school district characteristics. These two basic elements not only affect school desegregation success directly but also may affect the process of implementing desegregation (e.g., degree of support or resistance from various community and elite actors, the type of desegregation strategy used to foster compliance and implement school desegregation). These three blocks of variables then are all presumed to help determine the degree to which a school district will be successful in reducing racial isolation. Likewise, this same group of factors, for the most part, plus desegregation change should contribute directly and indirectly to an assumed school desegregation outcome--white student enrollment decline. A discussion of the expected relationship of each predictor shown in Figure 4 with desegregation success and white enrollment change follows.

FIGURE 4. HEURISTIC MODEL OF FACTORS INFLUENCING SCHOOL DESEGREGATION SUCCESS AND WHITE SCHOOL ENROLLMENT CHANGE



* Only for white school enrollment changes.

Predictors of Desegregation Success

External Influences. Since southern school districts were the initial targets of school desegregation court orders and HEW enforcement activities and since previous research has shown that districts in the South have achieved greater desegregation success (see Fitzgerald and Morgan, 1977b):

H₁ Desegregation success will be greater in southern than in nonsouthern school districts.

Federal coercion represents the second basic external influence hypothesized to affect desegregation progress. And previous research suggests that federal coercion is an important predictor of desegregation success (see Rodgers and Bullock, 1976a; Farley, 1975a; Giles, 1975a). Thus,

H₂ The greater the federal coercion the greater the reduction in racial isolation

School District Characteristics. Previous research also suggests that certain school district characteristics may affect desegregation success. Specifically, since districts which are county-wide in area tend to experience less white student outmigration than do citywide districts, desegregation success may be enhanced (see Hawley, et al., 1981; U.S. Commission on Civil Rights, 1977a). In addition, Dye (1968) and Farley (1975a) have found that large proportions of black students impede desegregation success, and Giles (1975a) and Fitzgerald and Morgan (1977b) suggest that large districts (based on enrollment) experience less success in reducing racial isolation than do smaller ones. Therefore:

- H₃ Countywide school districts will experience greater desegregation success than will noncountywide districts.
- H₄ Districts with lower percentages of minority students will achieve greater desegregation success than districts with high minority enrollments.
- H₅ Small districts (based on enrollment) will achieve more desegregation success than large districts.

Desegregation Process Variables. The implementation literature reviewed above (Van Meter and Van Horn, 1975; Sabatier and Mazmanian, 1980) as well as desegregation case studies (see Fitzgerald, 1975) also suggests that support and attitudes of policy implementors (e.g., school superintendents, school board members), community elites, and the general public at large may impinge on the implementation process. Thus:

- H₆ Desegregation success should be greater in districts where there is superintendent and school board support for desegregation efforts.
- H₇ Desegregation success should be greater in districts where community elite attitudes favor desegregation actions.
- H₈ Desegregation success should be greater in districts where there is active citizen involvement in implementing a desegregation plan.

In addition, Rodgers and Bullock (1976a) have found that the hiring of a new school superintendent and school board insulation facilitates desegregation success. Therefore,

H₉ Districts that hire a new superintendent immediately before desegregation activities begin should experience greater desegregation success.

H₁₀ The greater the insulation of school board members the greater the desegregation success.

Finally, while systematic research on the effectiveness of various desegregation strategies (e.g., open enrollment, rezoning, pairing/clustering, etc.) in reducing racial isolation is quite limited, research by Wegner and Mercer (1975) has found that the number and kinds of desegregation strategies employed by a district are unrelated to desegregation success. Thus,

H₁₁ The use of one kind of desegregation technique is not associated with a greater degree of desegregation success than the use of another kind.

Predictors of White Enrollment Change

A question that also receives considerable attention in comparative desegregation studies concerns the relationship between desegregation efforts and white student enrollment decline: Does school desegregation lead to the exodus of white students from a school district? The data collected here provides an excellent opportunity to test the relationship between desegregation efforts and white flight as well as to determine the effects of external, school district, and desegregation process variables on this unintended impact of school desegregation. The expected relationship of the variables shown in Figure 4 with white enrollment decline are as follows.

External Influences. Four types of external influences are hypothesized to affect white enrollment decline--region, federal coercion, suburban escape, and pre-implementation white school enrollment decline. While Rossell (1981: 36) suggests that the "evidence is inconclusive as to whether southern city school districts have greater white enrollment decline than northern school districts," research by Coleman, et al. (1975) has found that white student loss is greater from southern than from northern school districts. Thus,

H₁ Southern districts will suffer more white enrollment decline than nonsouthern districts.

Armor (1980: 197) argues that court-ordered desegregation plans may result in more white flight than board-ordered plans, primarily because court-ordered plans normally require more extensive pupil reassignments. Therefore,

H₂ The greater the degree of federal coercion the greater the white enrollment decline.

Suburban escape is an indicator of the availability of suburban neighborhoods to which white families can flee. The hypothesis is that,

H₃ The greater the availability of suburbs the greater the white flight.

Finally, pre-implementation white school enrollment decline is included as a measure to control for pre-desegregation white enrollment declines. The expectation is that,

H₄ Districts losing white students prior to desegregation implementation will suffer more white student outmigration than districts where pre-implementation losses are smaller.

School District Characteristics. The second group of influences includes school district characteristics--type of school district (noncountywide/countywide), minority enrollment (percentage), and size of school district (total student enrollment). Previous research suggests that white enrollment decline should be greater from (1) noncountywide districts, (2) large school districts, and (3) districts with high minority enrollments (U.S. Commission on Civil Rights, 1977a; Giles, 1978; Fitzgerald and Morgan, 1977d). Rossell (1981: 48), in particular emphasizes the continuing loss of white students suffered by big city school districts with large minority enrollments. Therefore,

H₅ White student loss will be greater from noncountywide than from countywide districts.

H₆ Large school districts will experience more white student losses than will smaller ones.

H₇ White enrollment decline will be greater from districts with high minority enrollments than from districts with lower minority enrollments.

Desegregation Process Variables. The third group of variables included as potential determinants of white student outmigration include superintendent and school board support, elite support, citizen participation, desegregation resistance, hiring a new school superintendent, school board insulation, and desegregation change. According to Hawley, et al. (1981: 61-65) school district and other local leaders must deal with the anxieties and fears associated with the school desegregation process. Thus, if school and community leaders support desegregation white student withdrawal should be lessened. In contrast,

Rossell (1981: 41) suggests that negative reaction and activities (desegregation resistance) can precipitate white flight. Similarly, the employment of a new school superintendent is hypothesized to be positively associated with enrollment loss. Hiring of an outsider may be seen by some as an indication that significant change is in the offing, which may frighten those committed to the status quo. Indeed, the actions of such officials may run counter to the dominant views held by community residents and elites, creating a controversial and politicized desegregation milieu (see Rodgers and Bullock, 1976a). In addition, the degree to which school board members are insulated is hypothesized to be positively related to white student losses. As Rodgers and Bullock (1976a) note, insulated board members are more likely to respond to extralocal pressures. Finally, a measure of the absolute change in the level of segregation pre- and post-implementation is included as a predictor of enrollment loss. The expectation is that desegregation change is positively related to white student losses during the year of desegregation implementation (Rossell, 1981; Armor, 1980). Thus, the hypotheses to be tested are:

- H₈ The greater the degree of support for school desegregation on the part of the superintendent and school board members the less the white enrollment loss.
- H₉ The greater the citizen involvement in the desegregation process the less the white enrollment loss.
- H₁₀ White enrollment decline will be less from districts where community elites support the desegregation effort.

- H₁₁ The greater the desegregation resistance the greater the white enrollment decline.
- H₁₂ Districts who hired a new school superintendent will suffer more white student losses than those who did not.
- H₁₃ The greater the degree to which school board members are insulated, the greater the white enrollment decline.
- H₁₄ Desegregation change should be positively related to white student loss during desegregation implementation.

Before closing this discussion of the expected relationships of the variables shown in Figure 4 with desegregation change and white enrollment decline, it might be noted that Chapter 4 contains a lengthy discussion of desegregation strategies and desegregation success. Chapter 5 elaborates upon the relationships of the variables with desegregation change, and Chapter 6 provides a background introduction to the white enrollment decline literature. The discussion now turns to the methodology used to gather data needed to operationalize many of the predictors--the case survey method.

The Case Survey Method

While Van Meter and Van Horn (1975) and Sabatier and Mazmanian (1981) suggest that such variables as implementor policy support, and community and elite attitudes may affect implementation success, the remaining problem is how to collect data needed to operationalize these influences. As noted above, data such as these are not to be found in

traditional reference sources. But as Fitzgerald's (1975) review of the case study literature found, desegregation case studies themselves often provide such information. What is needed is a data collection technique which will allow the systematic extraction of relevant information from case studies. The case survey method is one such technique.

The case survey method permits the extraction of relevant material from a group of cases in a reliable and replicable manner. Based upon predetermined parameters, the approach requires a researcher/analyst to assemble the available material on school desegregation for as many large districts as possible. The procedure then requires the analyst to answer the same set of questions using a structured instrument for each case study. The questions are closed-ended so that the answers can be quantified and systematically analysed. While no check can be made on the accuracy of the original case study, the reliability of the analyst-reader's responses can be determined by using another analyst and calculating measures of intercoder reliability. The following chapter discusses the advantages, limitations, and use of the case survey method. In addition, the source of each variable and its operationalization are also presented.

Summary

The primary purpose of this study is to assess the independent effect of variables representing three types of influences--external, school district, and desegregation process--on two school desegregation outcomes, desegregation success and white student enrollment decline.

The variables included in the analysis are among those that the implementation literature, in general, and desegregation case studies and aggregate analyses, specifically, suggest affect desegregation success. The impact of some variables that previous research has found to be related to desegregation success and white enrollment loss, however, are not tested. For example, research by Rossell (1981: 31) finds that the number of whites versus blacks reassigned as part of a desegregation plan may impede desegregation success and increase white flight. Efforts to collect reassignment data for inclusion in the present study were unsuccessful. In order to collect data needed to operationalize many of the variables included in the study, the case survey method is employed. The discussion now turns to the characteristics of this data collection and aggregation technique.

NOTES

1. Broh and Trent (1981: 1) refer to this literature more generally as "qualitative literature and expert opinion." They state, "The term 'qualitative literature' refers to books, articles, reviews, and commentaries that embody judgments, interpretations, perceptions or opinions that are not directly linked to statistical data. Where empirical findings are included, they are used descriptively rather than analytically."
2. The nine variables are: school board support, community climate, black population, community socioeconomic characteristics, residence patterns, political process, black action, local leadership, and extra local pressure.
3. The 27 case studies reviewed were: Tipton (1953); Allen Report (1964); Hauser (1965); Lang and Lang (1965); Luchterwand and Weller (1965); Pettigrew (1965); Dentler (1966); Swanson (1966); Beker (1967); La Frankie (1967); Bouma and Hoffman (1968); Heifetz (1968); Hendrick (1968); Rogers and Swanson (1968); Stout and Stroufe (1968); Warshaver (1968); Dammerell (1968); Sullivan (1969); Inger (1969); Noland (1969); Wogaman (1969); Rogers (1970); Bagwell (1972); Bonachich (1972); Rubin (1972); Caughey (1973); Holden (1974).

CHAPTER III

RESEARCH DESIGN

Introduction

The analytic goal of this research project is to examine systematically the impact of three types of independent variables--external influences, school district characteristics, and desegregation process influences (including desegregation techniques)--on two school desegregation outcomes: the success of school districts in ending racial isolation (desegregation success) and white enrollment decline (generally referred to as "white flight"). This chapter outlines the research design developed to pursue this goal. The chapter is divided into three parts. Part one describes the procedures by which the data were gathered. Part two presents the independent and dependent variables used in the analysis. Finally, part three discusses the statistical methods employed to analyze the data.

Case Survey Method (CSM)

At least three approaches are available for aggregating previous research--propositional, cluster, and case survey. Of the three approaches the propositional method is the most commonly employed; it is based on collecting statements of relationships from a set of

studies. The analyst assembles a group of well-known studies, "summarizes the findings, and weaves an argument about what statements of relationship are supported by the evidence" (Lucus, 1974a: 3). One of the basic goals of the approach is to resolve anomalous findings among studies through theory refinement and/or by pointing out methodological inconsistencies across studies. The propositional method is widely used in psychological research.

In contrast, the cluster and case survey methods are rarely used. Both of these approaches treat previous research as a source of data rather than as a source of conclusions or propositions. The cluster approach is based on the premise that "little headway can be made by pooling the words in the conclusions of a set of studies. Rather, progress will only come when we are able to pool the original data from the studies in a systematic manner" (Light and Smith, 1971: 443). The approach necessitates that data from several studies be pooled; the combined data are viewed as a sample of the larger population. Findings emerging from the analysis of the combined data should reflect those found in individual studies (see McClintock, et al., 1979). The principal impediment to the use of the cluster method is that the original studies must have been quantitative in nature and that the same or highly comparable variables must have been used across studies (Lucus, 1974a: 7).

The final approach is known as the case survey method. This method enables disjointed case studies to be analyzed in common conceptual terms. According to Lucas (1974a: 8):

To distill the lessons from these case experiences, the analyst prepares a set of questions to determine the presence and intensity of common characteristics, events, and outcomes contained in each of the case studies. The possible answers to the questions are carefully structured and defined so that the analyst, after reading the case materials, can readily determine the most appropriate response. The answers to these questions are determined in the same manner for each of the cases that have been selected for study. The results can then be put in a machine-readable form and analyzed.

One of the earliest applications of the case survey method occurred in 1972. In that year, Rand was requested by HEW to draw together existing knowledge about the value of alternative citizen participation organizational forms from the literature (see Yin, Lucas, Szanton, and Spindler, 1973). After reviewing 51 case studies, the research team found that "organizations where the citizens had 'substantial influence' in the investigation of complaints were much more likely to be successful in having their views about services implemented into policy" (Lucas, 1974b: 5). The 51 case studies individually had, for the most part, not suggested a significant relationship between the complaint process and implementation process. Reflecting on the study Lucas (1974b: 5) states, "the case study survey can uncover factors that a simple reading of the cases could have altogether missed."

The case survey method has also been used in two recent studies sponsored by the National Science Foundation. Yin and Yates (1975) employed the method to analyze the urban service decentralization process across 254 case studies. And based on 140 case studies, Yin, Heald, and Vogel (1977) utilized the approach to study the propensity of state and local governments to adopt technological innovations.

A discussion of the salient features (i.e., advantages, limitations, and decision rules) of the case survey approach follows.

Advantages

The principal advantage to be gained through the use of the CSM is that the richness of detail found in most studies can be captured and systematically converted into quantitative data. Other advantages of the method include:

- o the CSM forces the research analyst to establish clear decision rules concerning the quality, inclusion, and exclusion of cases to be analyzed (Yin, Bingham, and Heald, 1976);
- o the CSM provides a framework by which a conceptually related but methodologically disparate set of cases can be systematically analyzed (McClintock, et al., 1979);
- o the CSM is a relatively inexpensive way to aggregate existing research (Lucas, 1974b).

Limitations

While the case survey approach offers considerable promise as a method for systematically examining a case study literature, the use of case studies as a source of information poses several problems. Three such problems merit special attention.

First, the accuracy and validity of findings reported in case studies cannot be verified and can be only partially checked. Second, those studies that define a case study literature may represent "a nonrandom sample of observations of the phenomena under study" (Lucas, 1974b: v). Finally, analyst-readers' responses to items on the case survey instrument may be inadvertently biased owing to misunderstanding of the concepts being operationalized.

To address these potential problems and as a prerequisite to using the CSM, a set of decision rules must be developed to insure a rigorous case survey.

Decision Rules

Decision rules are of two general types: (1) rules to aid in the selection of and search for case studies; and (2) rules detailing concept specification and checklist reliability (Lucus, 1974b: 6).

In the present study, a four-point set of decision rules was established for case study selection:

- (1) A district's desegregation effort had to be documented in a published or unpublished report (e.g., book, journal article, Civil Rights Commission report, court case). Expert testimonials or interviews with local officials could not serve as the primary data source.
- (2) The major desegregation effort of a district must have occurred between 1968 and 1976. (Data for the desegregation index and white school enrollment employed as dependent variables in the study are limited to this period.)
- (3) The total school enrollment of the district had to exceed 20,000 students. The intent of the project was to include only "large" districts on the basis that more published information would be available than for small districts. In addition, research has

shown that size of district may affect the desegregation process. Imposing a size limit then precludes a perhaps incongruous comparison between a group of very large and very small districts.

- (4) The minority percentage in the school system had to equal or be greater than 10 percent for at least one of the years between 1968-1976. Essentially, the 10 percent minimum was established on the assumption that districts with a very small proportion minority are not likely to face the same issues and problems in desegregating that confront other districts.

Based on these case inclusion criteria, an exhaustive search for written material on large district desegregation, both published and unpublished, was undertaken. In addition to writing the 261 school districts with 1976 school enrollments exceeding 20,000, the following sources and agencies were consulted or solicited for research material:

1. Educational Resources information Center (ERIC) documents
2. dissertation abstracts
3. court cases
4. National Institute of Education (NIE) library
5. regional offices of the U.S. Commission on Civil Rights (USCCR)
6. state departments of education
7. state offices of human rights
8. various unpublished reports of the USCCR
9. all university-based Desegregation Assistance Centers

Written contacts with school districts, in particular, resulted in identifying various individuals within or without the school system who might have useful information. A number of telephone calls were placed to various people such as directors of transportation for school districts, district lawyers, and other academic-based researchers and research organizations.¹ Such contacts did produce some written material (e.g., unpublished reports) that otherwise would not have been available.

In total, the search effort resulted in identifying 52 usable case studies.² These 52 cases represent the overwhelming majority of documented desegregation efforts conforming to the four-point criteria outlined above. However, since it is possible that a few cases might have been inadvertently overlooked, the 52 cases are viewed as a sample rather than a population. The references used to collect data for each of the 52 districts can be found in Appendix C.

The second general type of decision rule delineates concept specification and checklist reliability. With respect to concept specification, it is important to remember that the case survey approach, like any other research methodology, is merely a tool designed to aid in the collection of data. The method itself is not a substitute for theory. Or, as Lucas (1974b: 19) states:

The greatest strengths and the fundamental weaknesses of the case survey method are the same: the almost infinite flexibility of the theories and concepts that can be studied. . . . In practice, one cannot ask thousands upon thousands of questions of each case history, hoping to stumble across those mysterious factors that have a decisive influence. Some sense of theory is essential to bringing the inquiry into focus.

A survey of previous school desegregation research findings suggests that three classes of variables may influence school desegregation success: (1) school district characteristics such as percent minority in the district and school district size; (2) external pressure in the form of court or HEW coercion; (3) desegregation process variables such as citizen participation, elite support, superintendent and school board support, specific desegregation techniques.

Unlike the first class of variables, school district characteristics, concepts such as external pressure, citizen participation, elite support, and desegregation strategies are much more elusive and, therefore, more difficult to operationalize. Moreover, the effects of many of these variables on school desegregation, with the exception of external pressure and district characteristics are for the most part not tested in previous aggregate studies. Thus, the collection of desegregation process indicators became the central focus of the case survey instrument.

In preparing the school desegregation case survey instrument, technically called a "checklist," considerable time and thought was given to the questions to be included. Finally, after the original draft instrument was reviewed by a desegregation assistance center director and an outside consultant as well as tested by an analyst-reader, the case survey questionnaire was finalized.

The instrument was divided into four sections, with each section seeking a specific type of information. The four sections include:

- (1) desegregation plan background questions (see Appendix A, questions 10-15b);
- (2) questions concerning court involvement in the desegregation process (see Appendix A, questions 16-17);
- (3) questions seeking information about the desegregation plan techniques employed by districts (see Appendix A, questions 18-47);
- (4) desegregation plan implementation questions (see Appendix A, questions 48-77).

To insure that analyst-readers understood the concepts tapped by the various questions, a roundtable discussion was held in which each question was reviewed, discussed, and agreement on the meaning was reached. In addition, the two analyst-readers in charge of completing the checklists were instructed to complete the same three case surveys, discuss answers, and resolve differences in the meaning of questions.³

Despite these preliminary procedures, as the project progressed additional clarification was required. As these occasions arose, written memos were prepared and distributed to the analyst-readers (see Exhibits A, B, and C), and a glossary of desegregation terms was prepared (see Appendix B). In short, every effort was made to familiarize the analyst-readers with the purpose and use of the CSM. The checklists as completed by the coders, however, were not accepted at face value. The CSM requires checklist reliability.

Reliability can be defined as "the degree to which separate, independent measurements or judgments of the same phenomena agree with

EXHIBIT A

CASE SURVEY INSTRUMENT:
DEFINITIONS OF SELECTED CONCEPTS/TERMS

Magnet-only plan. An essentially voluntary program under which parents may choose to send their children to a citywide or areawide school offering a special curriculum or educational program. Such magnet schools appear to be closely related to an open enrollment approach, since no mandatory reassignment is involved. Magnet-only plans thus depend on making such schools sufficiently attractive to induce parents to voluntarily leave their segregated neighborhood schools.

Magnet-mandatory plan. This form of magnet school is not optional. The choice is not between a segregated neighborhood school and a desegregated magnet school. Parental choices are: (1) leave the school system, (2) accept the forced reassignment to a desegregated school, or (3) choose a desegregated magnet school (Rossell, 1979).

EXHIBIT B

CASE SURVEY INSTRUMENT:
GUIDANCE FOR Q. 25-27 ON BUSING

25 through 27. To estimate amount of busing before and after plan implementation, divide the number being bused by race by the total school enrollment for that race. For example, if the white student population is 10,000 and 3,000 were bused before the plan, mark a "3" for white on question 25. If 4,000 whites were bused following desegregation, a "4" would be marked for question 26. To estimate the increase in busing for question 27, a percentage increase would be calculated. In this example, the increase in whites being bused of 1,000 would be divided by the initial number being bused, 3,000, to yield a figure of 33.3 percent. Thus a "3" would be marked for question 27.

If the before and after busing figures are expressed only as percentages, the increase in busing would be calculated as follows: subtract the initial year's figure from the more recent figure, then divide the difference by the initial year percentage. For example, if 40 percent of the students were bused before the plan was implemented and 55 percent afterward, the calculation is as follows:

$$\begin{array}{r}
 55 \\
 -40 \\
 \hline
 15 \\
 15 \div 40 = .375 \text{ or } 37.5 \text{ percent increase}
 \end{array}$$

Question 27 would then be marked as a "4"

EXHIBIT C

CASE SURVEY INSTRUMENT: GUIDANCE FOR Q. 70 ON VIOLENCE

0	2	4	6	8	10
None	localized low intensity short duration	localized medium intensity short duration	localized high intensity short duration	localized high intensity long duration	widespread high intensity long duration
		<u>OR</u>	<u>OR</u>	<u>OR</u>	
		localized low intensity long duration	widespread medium intensity short duration	widespread medium intensity long duration	
		<u>OR</u>	<u>OR</u>	<u>OR</u>	
		widespread low intensity short duration	widespread low intensity long duration	widespread high intensity short duration	

Level of Intensity

low--vandalism, rock throwing, fighting

medium--above plus some arson and interference with police, fire, school officials

high--above plus moderate to extensive arson, sniping, killing

each other" (Yin and Yates, 1975). The validity of the data as well as the ability to generalize the results of the study are directly related to the level of reliability (North, et al., 1963).

For purposes here the measure of reliability is the degree of interanalyst agreement. The following steps were followed in measuring interanalyst agreement.

- Step 1. In completing the checklists the coders were required to rank the "level-of-confidence" of their response to each questionnaire item as "sure," "not sure," or "impossible to answer."
- Step 2. A random sample of 10 case surveys⁴ was drawn from the pool of 52 cases. The sample was stratified in two ways--by analyst-reader and by the time period when the checklist was completed (early, middle, or late stage of coding process).
- Step 3. A tally sheet was created to facilitate the calculation of percentage agreement scores by question and across all items.

Table 1 summarizes the results of this exercise and compares the percentage agreement scores with interanalyst agreement scores reported in two recent studies employing the case survey method. As Table 1 reveals, of the total number of questions possible to answer, coders marked a "sure" level-of-confidence for 83 percent of the answers and "not sure" for 17 percent of the responses. Interanalyst agreement on "sure" questions was 85 percent and 75 percent for "not sure" questions. These figures compare quite favorably to interanalyst

TABLE 1

SUMMARY OF INTERANALYST AGREEMENT AND COMPARISON OF RESULTS
WITH TWO MAJOR STUDIES USING CASE SURVEY APPROACH

Level of Confidence ^a	<u>Percentage of Responses</u>			<u>Percentage of Agreement</u>		
	School Deseg.	State & Local ^b Innov.	Urban Service Decent. ^c	School Deseg.	State & Local ^b Innov.	Urban Service Decent. ^c
Sure	83.1	74.4	NR	85.2	77.1	82.4
Not Sure	16.9	25.6	NR	75.0	59.8	60.2

^a"Sure" includes those responses for which both coders were sure; "not sure" includes those responses for which one or both coders were not sure; does not include responses for which either coder considered the question "impossible to answer."

^bYin, Heald, and Vogel (1977: 26).

^cYin and Heald (1975: 38).

reliability figures reported by Yin, Heald, and Vogel (1977) in their study of state and local technological innovation (77.1% and 59.8%) and by Yin and Yates (1975) in their study of urban service decentralization (82.4% and 60.2%).

The level of interanalyst agreement across the 10 cases by question as well as additional information concerning intercoder reliability is found in Appendix D.

Independent and Dependent Variables

Previous studies utilizing the case survey approach have used the method as a means of collecting both outcome (dependent) and explanatory (independent) variables. For example, in their study of state and local technological innovation, Yin, et al. (1977) used the case survey instrument to collect data on the propensity of state and local governments to adopt technological innovations as well as to collect various "device, background, and implementation" variables that were found to be significant correlates of successful innovative efforts.

In the present study, the case survey instrument was used primarily to collect desegregation background information (e.g., date of major desegregation effort, court involvement, etc.) and desegregation process variables (e.g., citizen participation, school board support, etc.). The two dependent variables analyzed in the study, desegregation success and white enrollment changes, as well as other school district characteristics (e.g., percent minority, school enrollment) were derived from the Office of Civil Rights school file and were supplied in machine-readable form by Professor Franklin Wilson of the University of Wisconsin (Madison).

Table 2 presents the principal variables employed in subsequent analyses.⁵ The table also provides the source from which each variable was taken. Before proceeding to a discussion of the statistical methods that were employed to assess the relationships among the variables presented in Table 2, a few comments about the two dependent variables used in the study are in order.

To measure desegregation success, a widely used segregation index, generally referred to as the "index of dissimilarity" (DI), is employed (see Farley and Taeuber, 1974; Giles, 1974, 1975b; Farley, 1975a, 1976a, 1976b; Giles and Walker, 1975; Rodgers and Bullock, 1976a, 1976b; Morgan and Fitzgerald, 1980). This index was created originally by Taeuber and Taeuber (1965) to measure residential segregation in American cities. The index represents the amount by which each school in a district departs from the precise racial composition of the entire district. In other words, the index value indicates the percentage of the total minority or white students that would have to change schools in order to achieve racial balance.⁶

While at least 13 indices of segregation are in general use (see Taeuber and Wilson, 1979b) and controversy surrounds which index most accurately measures (de)segregation (see Cortese, et al., 1976; Fitzgerald and Lyons, 1978), the index of dissimilarity, according to Taeuber and Wilson (1979a: 6), "provides the most useful operationalization of relevant features of the concept 'segregation' for the purposes of policy analysis." The index has important policy implications in three respects. First, the index is easily interpreted. The index

scores range from 0 (indicating complete desegregation) to 100 (indicating complete segregation). Any value between these two endpoints of the scale represents the percentage of minority or white students who would have to change schools in order for every school to reflect district racial composition. For example, if district A has a dissimilarity index score of 50.0, then either 50 percent of the minority students or 50 percent of the white students, of some combination of both (e.g., 30% minority and 20% white) would be required to change schools in order to obtain total desegregation (DI score of zero).

Second, the index facilitates the analysis of temporal changes in the status of local desegregation efforts. For instance, if in 1969 district B had an index score of 80.0 and after an extensive desegregation effort in 1970 the score remained 80.0, then one could safely assume that the district's efforts were not successful.

Finally, and closely related, the index can be employed by the courts or HEW officials to measure the extent to which local districts are in compliance with mandates to end dual school systems.

With respect to changes in white school enrollment, while a modest amount of controversy surrounds how to explain it (see Chapter 6), little disagreement exists about how to measure it. In general, changes in white school enrollment are operationalized by a percentage change from time X to time Y divided by the value for the antecedent year (time X).

In sum, the two dependent variables are change measures. Desegregation success is operationalized as the absolute change in the index of dissimilarity from the year prior to desegregation implementation

TABLE 2

PRINCIPAL VARIABLES EMPLOYED IN STUDY AND DATA SOURCE

Variables	Data Source
<u>Dependent</u>	
Desegregation change (1968-76)	OCR school district file (from Franklin Wilson)
White school enrollment change (1968-76)	OCR school district file (from Franklin Wilson)
<u>Independent</u>	
<u>External Influences</u>	
Region (0/1) ^a	<u>County-City Databook</u> , 1977
Coercion (0-7) ^b	Case survey--questions 10, 16, 17, 62
Suburban escape ^c	U.S. Bureau of the Census, 1972 (Table 19)
Avg. pre-implementation white enrollment declines ^d	OCR school district file (from Franklin Wilson)
<u>School District Characteristics</u>	
Type of school district (0/1) ^e	Case survey--question 50
Minority students (%)	OCR school district file (from Franklin Wilson)
Size of district (total student enrollment) ^f	OCR school district file (from Franklin Wilson)
<u>Desegregation Process Variables</u>	
Superintendent and school board support (0-4) ^g	Case survey--questions 56, 65
Citizen participation (factor score) ^h	Case survey--questions 57, 59, 60
Elite support (factor score) ^h	Case survey--questions 51, 66
Desegregation resistance factor score) ^h	Case survey--questions 68, 70, 71
Hiring of new school superintendent (0/1) ⁱ	<u>Patterson's American Education</u> , Vols. 54-72
School board insulation (0-3) ^j	Mail survey of 52 school districts

TABLE 2 CONTINUED

<u>Desegregation Techniques</u> ^k	
Open enrollment	Case survey--questions 18, 38
Construction of new schools	Case survey--questions 19, 39
Pairing/clustering	Case survey--questions 20, 40
Magnet schools	Case survey--questions 21, 41
Rezoning	Case survey--questions 23, 43

^a0 = Nonsouth; 1 = South. South includes the District of Columbia, the 11 states of the Confederacy, and six border states (Delaware, Kentucky, Maryland, Missouri, Oklahoma, and West Virginia that had laws requiring separate school systems at the time of the 1954 Brown decision.

^bA seven-point index that sums: (1) source of desegregation impetus, 0 = local, 1 = HEW, 2 = court order; (2) court order plan parameters, 0 = none, 1 = recommendations, 2 = specified plan; (3) court specify racial balance, 0 = none, 1 = recommended minimum and maximum racial balance, 2 = ordered minimum and maximum racial balance; (4) court mandated special master, 0 = no, 1 = yes.

^cIndicator of availability of alternative schools in the metropolitan area. Operationalized by dividing total school enrollment in the suburban ring of the SMSA by total district enrollment for the central city. The higher the ratio the greater the availability of other schools in the area.

^dUsed in the white flight analysis as a control measure to represent trends in pre-implementation white enrollment change. Calculated by summing pre-implementation percentage white enrollment changes and dividing by appropriate number of time points.

^e0 = noncountywide, 1 = countywide.

^fYear before major desegregation effort.

^gSchool board support, 0 = opposed, 1 = neutral, 2 = favor; superintendent support, 0 = opposed, 1 = neutral, 2 = favor.

^hThese three variables represent dimensions of community and local elite involvement in and support of local desegregation efforts. The original eight variables from the case survey instrument were factor analyzed using the common factor model. Based on Kaiser's criterion (eigenvalue ≥ 1.0), three factors emerged: Factor 1 was labeled citizen participation; Factor 2, elite support; and Factor 3, desegregation resistance. In total, 73.5 percent of the common variance was captured by the three dimensions.

TABLE 2 CONTINUED

ⁱ A district received a score of 1 if a new superintendent was hired the year before or year of the district's major desegregation effort.

^j A three-point index measuring the degree to which local school boards are more insulated from outside influences: size of school board $> 7 = 0$; $\leq 7 = 1$; term of office $< 2, 3 = 0$; $\geq 4 = 1$; number of meetings per month $> 2 = 0, 1 = 1$. Thus, the smaller the size of the school board, the longer the term of office, and the fewer the number of meetings per month, the more insulated the school board (see Morgan and Fitzgerald, 1980).

^k The case survey instrument also allowed the analyst-reader to record educational parks as a desegregation strategy. However, this method was not used as a primary technique by any of the 52 districts.

(T-1) to implementation year (T). White enrollment change is calculated as white school enrollment implementation year (T) minus white school enrollment the year prior to implementation (T-1) divided by the white school enrollment the year prior to desegregation (T-1).⁷ The year prior to and year of major desegregation effort by grade level as well as dissimilarity index scores over time for each of the 52 districts can be found in Appendix E.

Certain characteristics of the 52 districts should be provided here. The majority of the districts are southern (31), although a sizable number are located outside the South (21). South is defined here as those 11 states of the Confederacy and six border states (see Table 2, note a). Partly because the bulk of the cases are from southern states quite a few districts are countywide (20). The majority of the districts (32), of course, do not encompass the entire county. As mentioned above the minimum enrollment for the entire school system was set at 20,000 students. At the year of desegregation the average (mean) size of the 52 districts was 72,510 (median = 54,974). The range was from 12,494 to 244,016 (the actual size variable for four districts fell below 20,000 because enrollment data for one level only were used). The minimum proportion minority was set at 10 percent for at least one year of the study. The average (mean) figure was 33.4 percent (median = 27.9%). The actual range was from 5.5 to 77.4 percent, with minority data for a few districts falling below the minimum for part of the period under study.

Methods

To assess the effects of the three types of independent variables--external influences, school district characteristics, desegregation process influences and strategies--on the two desegregation outcome variables--desegregation success and changes in white school enrollment--a series of bivariate and multivariate statistical analyses are performed. Chapters four through six summarize the results of these analyses.

Chapter 4 presents a preliminary analysis of the relationship between desegregation strategies employed across the 52 school districts and desegregation success. Since local school officials may opt to use one type of desegregation strategy to desegregate elementary schools and another type to end racial isolation in secondary schools, the analysis of desegregation strategies and desegregation success is performed by school level. Mean analysis serves as the primary statistical procedure for estimating effects. In Chapter 5 an attempt is made to place school desegregation in a multivariate context. Using multiple regression, the independent effects of the three classes of predictor variables on desegregation success are determined. Finally, employing primarily the same statistical methods and explanatory variables, Chapter 6 presents the results of the analysis of white enrollment change.

NOTES

1. Many of these contacts yielded information that was used to check the accuracy of information presented in certain case studies, or to answer specific questions where case studies did not report information (e.g., busing information).
2. Thirty-six other documented desegregation efforts were found in the literature search. Unfortunately, however, for 25 of the 36 cases the district's desegregation efforts occurred either before 1968 or after 1976. In four cases the school district's percent minority did not reach the 10 percent criterion. Finally, the desegregation efforts as reported in seven cases were deemed insufficient in depth as well as breadth for inclusion in the study.
3. Two of the practice cases were among those that were unusable because they did not meet either the size or date criterion (Wilmington, Delaware and Stamford, Connecticut). The third trial case was Tulsa, Oklahoma, for which the mutually agreed upon final instrument was used as one of the 52 total cases.
4. The ten cases were: Newport News, VA; Clark County, NV; Boston, MA; Colorado Springs, CO; Wichita, KS; Dade County, FL; Richmond, CA; Houston, TX; Mobile, AL; Minneapolis, MN.

5. The effects of several other variables (e.g., residential segregation, busing increases) on the dependent variables are also assessed. Where appropriate, the relationship of these variables with desegregation outcomes are reported.
6. The formula for calculating the index of desegregation is:

$$D = \sum_{i=1}^K \frac{T_i (P_i - P)}{2TP(1-P)}$$

where: P_i = proportion of students in a school who are minority group members;

P = proportion of the minority population of the total school district population;

K = total number of schools in district;

T_i = total population of the i th school; and

T = total population of the school district.

A value of 100 (complete segregation) is observed when the differences between (P_i) and (P) are at their maximum. Conversely, a value of 0 (complete desegregation) is obtained when (P_i) equals (P) for all i 's (see Taeuber and Wilson, 1979a: 6).

As a note of caution, the DI values are not statistically meaningful if: (1) a school district contains only one school; and/or (2) a district contains very few members of a given ethnic category. In order to guard against statistical artifacts Taeuber and Wilson suggest that when working with districts with populations of 5,000 or greater, a record should be deleted if the minority population is less than 3 percent or greater than 97 percent (Taeuber and Wilson, notes section of codebook for School District Universe Data File).

7. A number of researchers suggest that while the use of gain scores is an intuitively appealing approach to measuring change, the approach should be used with caution (see Lord, 1963; Bohrnstedt, 1969; Van Meter, 1974). The primary problem of measuring change in absolute terms is that the measure of change (Δ) resulting from the subtraction of $t_2 - t_1$ is, in part, a function of the value at t_1 (Van Meter, 1974: 128). That is, initial standing has an effect on subsequent change. Thus, statistical control is not achieved since the effect of t_1 has not been totally removed from t_2 (the correlation between change (Δ) and t_1 does not equal zero), and the relationship between change and initial standing is often negative (Bohrnstedt, 1969: 115-116).

A negative relationship between initial standing and a change measure introduces regression effects into the analysis. For as Bohrnstedt (1969: 116) notes: "Anytime a variable is imperfectly correlated with itself across time, regression toward the mean can be expected to occur." The lack of perfect correlation between the same variable over time can be due to three factors: (1) the effect of a second variable (or variables) causing change, (2) measurement error, or (3) a combination of both of these influences (Bohrnstedt, 1969: 116). And Bohrnstedt notes that since initial measurement and change are correlated, the use of gain scores to measure change accentuates measurement error thus creating difficulties in discerning whether change is due to other variables or is attributable to initial values.

In order to create a change measure that is independent of values at t_1 , Lord (1963), Bohrnstedt (1969), and Van Meter (1974) suggest that the regression of t_2 on t_1 values is preferable. Resultant residuals from the ordinary least squares equation become the measure of change; positive residualized scores indicate that the amount of change from t_1 to t_2 are greater than that which would have been predicted using least squares procedures. Negative residualized scores indicate an amount of change less than would be predicted.

Despite these potential problems, in the present study gain scores are used to measure desegregated change, and white enrollment change is expressed in terms of percentage points. The underlying rationale for choosing to measure change in these ways is for comparability with other research. Most studies measure desegregation change in absolute terms. In fact, Rodgers and Bullock (1976a: 175-176), after evaluating several alternative ways of measuring desegregation change, suggest that absolute change is the most appropriate method of measuring desegregation success. With respect to white enrollment change, percentage change is the most frequently employed measure.

CHAPTER IV

DESEGREGATION TECHNIQUES: A PRELIMINARY ASSESSMENT OF EFFECTIVENESS

Introduction

In developing a desegregation strategy, school district officials, desegregation planners, and the courts must attempt to strike a delicate balance between local values, mores, and environmental conditions, on the one hand, and the national policy mandate to end dual school systems, on the other. No foolproof blueprint exists. As Crain and Hawley (1981: 10) put it, "once armed with criteria for reassignment and with a knowledge of the alternative strategies that can be employed, the desegregation planner is an artist, not a technician or scientist." He or she must pick and choose among a plethora of available desegregation strategies and attempt to find one or a combination of techniques that will work under local conditions.

This chapter offers a summary of current knowledge about the effectiveness of various desegregation strategies in reducing racial isolation and white student outmigration. The summary is organized into four sections. The first section discusses the purpose (goals) of desegregation plans and the standards the courts may use in judging

their adequacy. Types of desegregation strategies (voluntary and mandatory) are identified in section two. The effectiveness of desegregation techniques based on 52 case experiences is assessed in section three. Finally, the findings and implications of the findings are discussed in section four.

Desegregation Goals and Court Standards

Desegregation Goals

While school desegregation has many goals, its primary one is to redefine the racial mixture of students. In fact, Hughes, et al. (1980: 7) view desegregation plans as "body mixers pure and simple." The successful plan ends racial isolation both among and within schools. Desegregation among schools primarily concerns how closely the racial mix of students in individual schools conforms to districtwide norms. Desegregation within a school concerns those actions which impede interracial contact, such as tracking and exclusion from extracurricular activities, or as Hawley and associates (1981: 3) state, "a range of practices that result in racially identifiable classes or groupings with no demonstrable educational necessity." Even if a district is successful at achieving racial balance among its schools, the positive value of that achievement is negated if within school desegregation is lacking.

A desegregation plan ought also be designed in such a way as to preclude resegregation. Thus, the aim is not only to end racial isolation but also prevent it from recurring in the future.

Resegregation may be due to one or a combination of factors including (1) "flight" from the district (moving or enrolling in private schools), (2) changed residential patterns within the district, or (3) a shift in births within the district.

Further, if desegregation is to be effective and equitable, it should result in improved race relations (ideally, "color blindness"), among students, improvements in educational quality for all races, and community commitment to the local school system (which might be shown, for example, by reduced opposition to desegregation and better fiscal support for the schools).

What are the basic components of a school desegregation plan that can accomplish these goals? Willie (1978: 58-59) suggests the following:

. . . (a) there is a systemwide approach; (b) the schools and not the student is the basic educational unit; (c) such units or schools that complement each other may be grouped into common attendance zones, districts, or regions for more effective and efficient operation and administration; (d) a uniform grade structure facilitates interchange between and easy access to all units or schools within the system; (e) opportunities are provided to pursue specialized interests as well as common concerns; (f) the existence of a monitoring structure insures good-faith implementation of the systemwide plan; (g) faculty is diversified.

Desegregation Techniques: A View From the Courts

While local school officials are primarily responsible for the formulation and implementation of desegregation plans, they must make decisions within the context of federal court rulings. Vergon (1981: 5-6) suggests that the courts may invoke five general standards in assessing the adequacy of local plans:

. . . the obligations of school officials is to bring about 'the maximum amount of actual desegregation in light of the practicalities of the local situation' . . . (Green v. Kent County, 391 U.S. 430, 1968; Swann v. Charlotte-Mecklenburg Board of Education, 402 U.S. 1, 1971).

. . . the primary criterion for assessing the legal adequacy of a plan . . . is its effectiveness in eliminating one-race or racially identifiable schools (Green).

. . . while prohibited from requiring school districts to achieve a precise racial mix or balance . . . courts are authorized to use racial ratios as a starting point in formulating or evaluating the effectiveness and legal adequacy of proposed plans (Swann; Columbus Board of Education v. Penick, 443 U.S. 449, 1979).

. . . where racially identifiable buildings persist, school districts are generally required to utilize, and courts to order the utilization of, the most effective desegregation technique reasonably available (Green; Davis v. Board of School Commissioners of Mobile, 402 U.S. 33, 1971).

Vergon is quick to note, however, that a host of other district-specific influences help guide federal court decisions, such as practical considerations (e.g., logistics of desegregation), education factors (e.g., curriculum capacity), and equitable principles (e.g., disproportionate racial burden).

Thus, while school policymakers must follow the law, they are not required to operate within a strategic straightjacket. In fact, the range of strategies that may be employed to reduce racial isolation is surprisingly large and includes everything from open enrollment and redrawing attendance zones to magnet schools.

Desegregation Strategies and Effectiveness

Close examination suggests that many desegregation techniques are variations of a few basic strategies. In considering desegregation

in northern communities, Kirby, et al. (1973: 39) isolate 27 different desegregation actions, which they then divide into three groups:

(1) symbolic-procedural (e.g., appointing a committee to study a specific problem), (2) voluntary participation (e.g., initiating compensatory education, hiring more black teachers), and (3) forced participation (e.g., instituting open enrollment, redrawing boundaries, closing schools, busing).

Most of the literature further divides those techniques falling under the above heading of "forced participation" into a number of other categories. For example, Hughes, Gordon, and Hillman (1980: 54) enumerate six popular techniques for pupil assignment: rezoning, contiguous pairing, noncontiguous pairing, clustering, single-grade centers, and islands, listed in order of "ease and economy of implementation." Desegregation specialist Gordon Foster (1973: 17-22) discusses five basic means: redrawing zone lines, pairing and grouping, modified feeder patterns, skip zoning, and site selection and construction policies, along with several so-called "optional methods" (including open enrollment and magnet schools). In their research on California school desegregation, Wegner and Mercer (1975: 128-129) construct a "desegregation action index" from six techniques: relocation, new construction, boundary changes, open enrollment, mandatory busing, and pairing. Table 3 summarizes the various techniques identified by these as well as other authorities.

Vergon (1981: 7) suggests that while the names assigned to techniques vary from study to study, desegregation strategies are of two generic types: voluntary desegregation strategies (e.g., open

TABLE 3

A SUMMARY OF DESEGREGATION TECHNIQUES
IDENTIFIED IN SELECTED STUDIES

Desegregation Techniques	Hughes, Gordon & Hillman (1980)	Foster (1973)	Wegner and Mercer (1975)	Clement, Eisenhart & Wood (1976)	Kirby, et al. (1973) ^a	Josey (1974)
Rezoning	X	X	X	X	X	X
Pairing	X	X	X	X		X
Clustering	X					
Single-grade centers	X					X
Islands	X					
Modified feeder		X				
Skip zoning		X				
Site selection/const./reloc./closing		X	X		X	X
Open enrollment (voluntary)		X	X	X	X	
Mandatory busing			X	X	X	
Magnet		X		X		X
Areawide/metropolitan (multidistrict)				X		X
Educational parks				X		X
Reorg. of grade structures						X

^aThis listing of four desegregation techniques from the Kirby, et al. study includes only those that could actually be used to desegregate the school system.

enrollment, magnet-only, majority to minority transfers), and mandatory desegregation strategies (e.g., rezoning, pairing, clustering).¹ Based on these two generic types of strategies, the effectiveness of different desegregation strategies in reducing racial isolation is now addressed.

Voluntary Techniques

Voluntary desegregation strategies such as open enrollment and free transfers represent the customary initial approach to a school desegregation order. Since voluntary desegregation plans allow students or their parents to select the school in the district they will attend, this type of desegregation plan is often the least objectionable and arouses the least controversy.

One means of voluntary assignment is majority to minority transfers. Called M and M transfers, these permit students to attend schools in which their race is a minority. Thus a white student may elect to leave his or her all-white or predominantly white school to attend a predominantly black or desegregated school. Minority children have the same option.

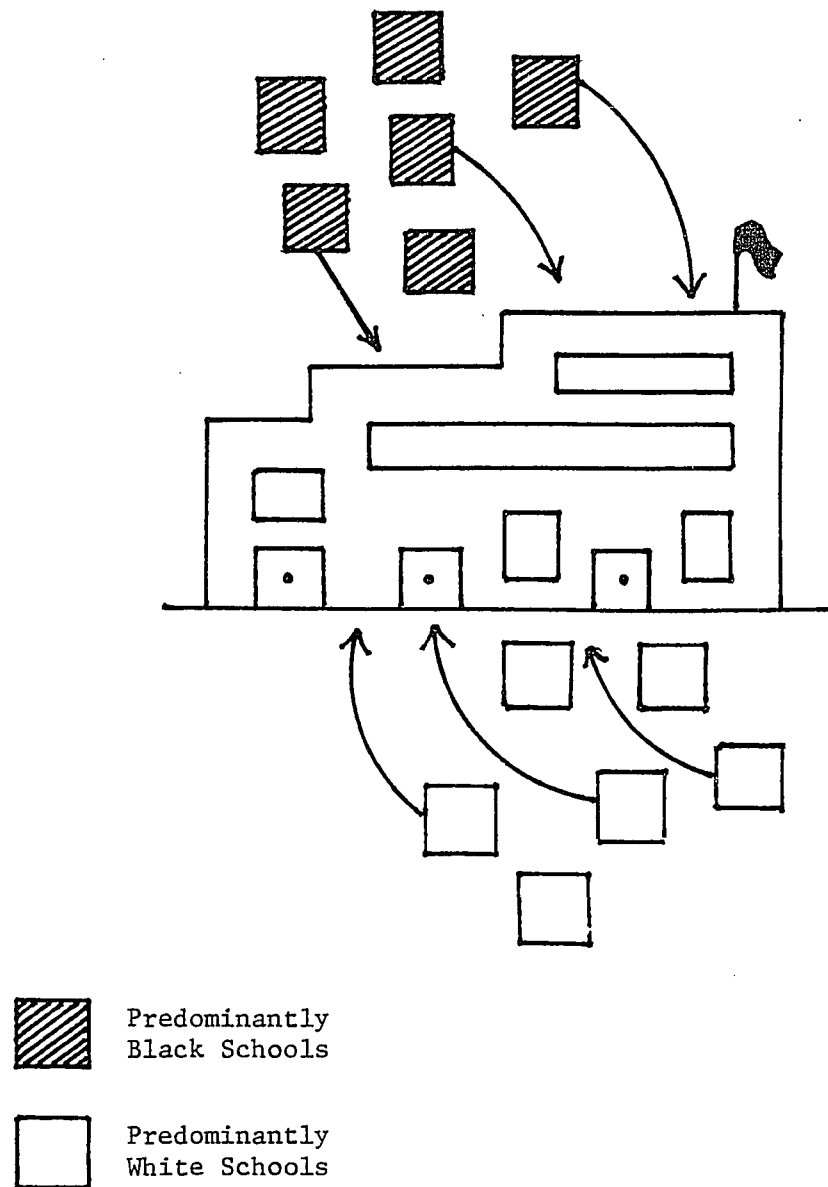
In general, voluntary assignments have not proven effective in reducing racial isolation. In 1968, the Supreme Court held that "If there are reasonably available other ways . . . promising speedier and more effective conversion to a unitary, nonracial school system, 'freedom of choice' must be held unacceptable" (Green v. County School Board of Kent County, 1968: 441). In response to this, many communities tried a novel voluntary desegregation strategy--magnet schools. Magnet schools are highly specialized schools that draw students from all over

the district. Frequently, these schools offer courses in the sciences, humanities, or performing arts. Students must apply to attend and are usually required to meet strict entrance standards. Magnet school plans may be of two types: magnet-only plans, which rely on voluntary participation, and magnet-mandatory plans, which require student assignment to either a desegregated magnet school or to another desegregated school within the district. Figure 5 provides an illustrative example of the magnet school approach.

Levine and Campbell (1977: 248) suggest various reasons for the appeal of magnet schools: They offer a variety of options as to curriculum, put great emphasis on quality instruction, and are funded from state, local, and federal sources. All of these are, of course, definite advantages, providing that magnet schools are effective at reducing racial isolation. The question is, are they effective?

A recent comparative study by Christine Rossell (1979: 304) of 18 school districts' experiences with magnet schools suggests that the effectiveness of magnets may depend on whether they are part of a mandatory citywide plan or are the sole means of school desegregation. Rossell advances two models of decision making. The first, labeled "conflict control," is associated with a magnet-mandatory plan. The conflict control model "assumes that coercion is necessary to induce whites to leave their segregated schools, but that some element of choice . . . is necessary to reduce hostility and white flight to manageable levels" (Rossell, 1979: 308). The second model is based on "public choice" theory. This model assumes that parents will choose the school their child will attend "on the basis of curricular

FIGURE 5. MAGNET SCHOOLS



SOURCE: Leronia Josey (ed.), Desegregation Resource Handbook. Philadelphia, PA: Philadelphia School District, Office of Community Affairs, 1974.

incentives" (Rossell, 1979: 305). In other words, a district may opt to use a (voluntary) magnet-only plan on the assumption that parents choose only the best schools for their children. Rossell (1979: 310) suggests that this assumption may be false: " . . . the only reason why some parents might choose a magnet school is that their neighborhood school is becoming predominantly minority."²

Hughes, Gordon, and Hillman (1980: 19) are even more critical in their appraisal of magnet schools:

Though this voluntary mechanism appeals to many educators and school boards, it has not proved effective in school desegregation. School systems in Dallas, Houston, Indianapolis, Minneapolis, and Philadelphia point to their magnet programs as important parts of their school desegregation plan; in fact, these programs have had minimal impact on the overall racial balances of these systems.

The authors conclude that magnet schools "simply have not worked as a tool of desegregation" (Hughes, et al., 1980: 19).

Two unanticipated problems are associated with magnet schools. First, they are expensive to establish and maintain, especially in light of their documented ineffectiveness in reducing racial isolation--their intended purpose. In these times of fiscal stress and nationwide decline in school enrollments, magnets may simply prove not to be cost effective. Second, it is believed that the use of magnet schools sometimes results in inequities among schools in a district, and are a form of "institutional racism" in that they may receive a disproportionate share of a district's per pupil educational expenditures. Rossell's analysis of "quality education indicators" in magnet and non-magnet schools in Boston lends some support to this notion. Table 4 summarizes Rossell's findings.

TABLE 4

BOSTON: CHARACTERISTICS OF MAGNET AND NON-MAGNET
SCHOOLS, 1975-1976

Quality Education Indicators	Magnet	Non-Magnet
Average per-pupil expenditure on regular teachers in dollars	843.9	714.6
Average per-pupil expenditure on special instruction in dollars	221.1	184.4
Average per-pupil expenditure on instructional supplies in dollars	64.6	49.5
Average facility age in years	41.8	49.1
Average pupil-teacher ratio	15:1	20:1

SOURCE: Reported in Rossell (1979: 311).

As Table 4 reveals, per-pupil expenditure on regular teachers, special instructions, and instructional supplies are higher in magnet than in non-magnet schools. Also, the average age of the educational facilities is less and the pupil/teacher ratio is smaller.

Consistent with this charge of "institutional racism" is the fact that to make a magnet school work, a district will on occasion take the best teachers and the best students in the district, further "ghettoizing" black students. For example, in Detroit, Foster (1973: 24) notes:

. . . the magnet middle schools had not aided desegregation but had served as an escape route for whites assigned to predominantly black schools; and the magnet concept itself set up a new type of dual structure with unequal educational opportunities. If one-fourth or one-half of

the schools in a system are developed as magnet schools with above-average expenditures and superior programs, then a dual structure has been established.

Rossell (1979: 30) concludes: "If a dual system based on race is a violation of the Fourteenth Amendment's equal protection clause, it is not at all clear that a dual system based on educational quality is not also such a violation."

Considerable attention has been devoted here to weighing both the advantages and limitations of magnet schools. The bulk of the evidence collected thus far would seem to support a federal court ruling concerning the use of magnets in Boston: reliance on a magnet school approach "would be to place the realization of the rights of Boston's black students in a vessel that would begin rudderless against the world" (401 F. Supp. 228). This is not to suggest that magnet schools should be abandoned as a desegregation strategy. As Hawley, et al. (1981: 22) remind us, "when magnets are part of a mandatory plan they can effectively attract students to desegregated settings. However, magnet plans should continue to be closely scrutinized by desegregation planners, academics, and the courts.

Mandatory Reassignment Techniques

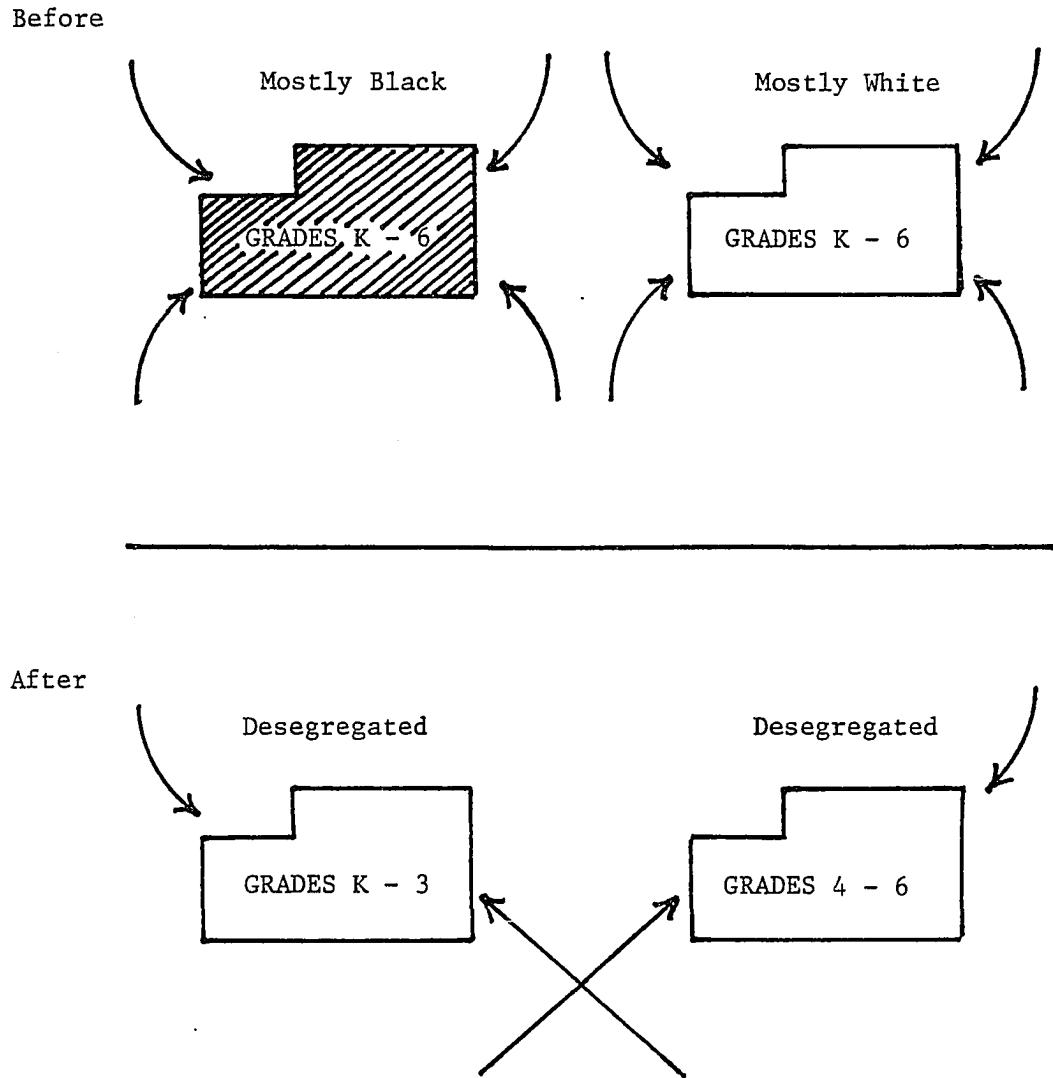
Under mandatory desegregation strategies, school officials, and not students or parents, decide which schools a student will attend. In contrast to voluntary desegregation techniques, Vergon (1980: 15) contends "the effectiveness of mandatory plans utilizing geographic reassignment techniques is suggested by the number and proportion of approved plans which incorporate this approach to a significant extent."

According to Hughes, Gordon, and Hillman (1980: 54) the "most desirable assignment patterns are ones that keep distances that must be traveled to and from school to a minimum" In addition, the authors (p. 54) note three other assignment considerations: "(1) the burden of the desegregation must not fall disproportionately on one race or economic level; (2) once desegregated, each school must have a racial ratio that reflects the overall racial ratio of the school district; and (3) the number of students assigned to any building must not exceed the established building capacity."

Four of the most commonly employed reassignment techniques (see Table 3) are: construction of new schools, pairing and/or clustering, rezoning, and magnet-mandatory schools. New schools are usually built in minority or mixed neighborhoods. The rationale for building new schools is relatively straightforward: If the educational facilities are new or modern, white parents may be more easily persuaded to send their children to integrated facilities; also, by building new schools in neutral neighborhoods, commuting time may be reduced; and finally, some older schools are simply not large enough to accommodate the increased number of students resulting from integration.

Pairing and/or clustering is a technique whereby two or more schools are grouped together to form a single school. Children attend one school for a few years, then attend the other. If, for example, a black school containing grades 1 through 6 was paired with a white school nearby containing the same grades, all students in grades 1 through 3 might attend one of the schools while those in grades 4 through 6 attend the other school. For an illustration of how pairing or clustering might work, see Figure 6.

FIGURE 6. PAIRING/CLUSTERING



SOURCE: Leronia Josey (ed.), Desegregation Resource Handbook. Philadelphia, PA: Philadelphia School District, Office of Community Affairs, 1974.

Rezoning of school boundaries is also a widely used desegregation technique. According to Foster (1973: 17) rezoning is the "least disruptive and easiest way to achieve edesegregation," especially at the secondary school level. Hughes, et al. (1980: 54) comment:

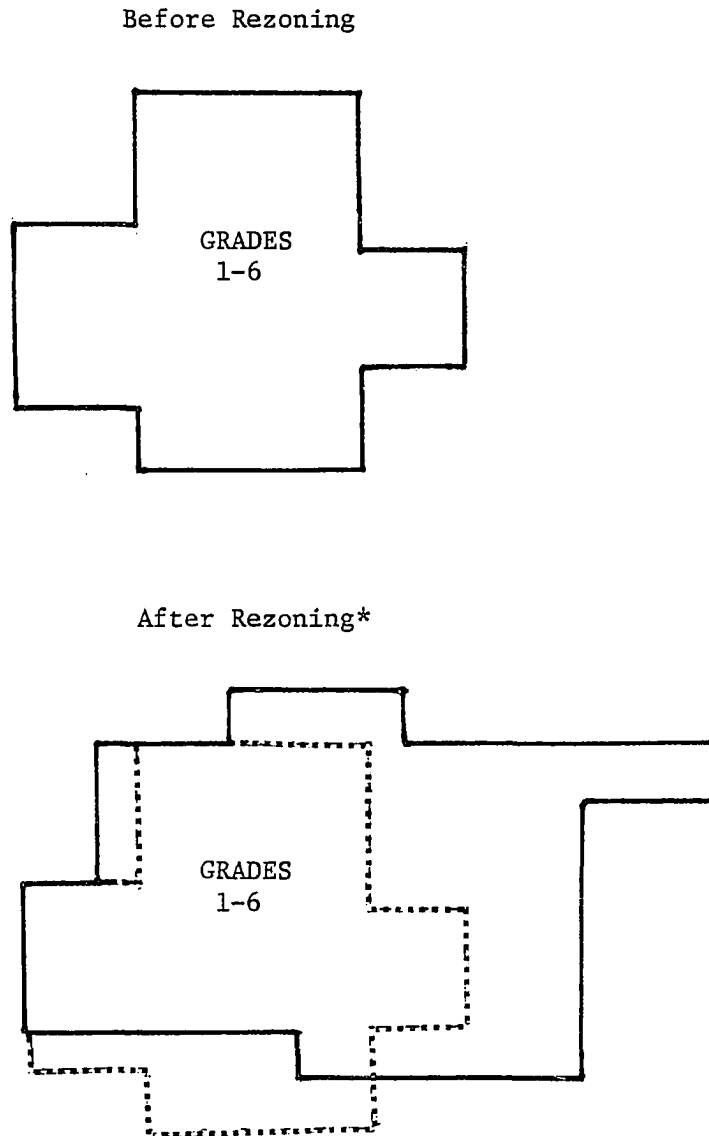
Redrawing attendance boundaries causes minimal disruption within the school community and achieves the desired goal of racial balance. This technique is easier to use with high schools because high school attendance zones draw from a larger geographic area. This is the first technique that should be considered when preparing a desegregation plan.

Figure 7 provides an example of how rezoning might be accomplished.

Finally, magnet-mandatory schools may be used as a component part of a large school desegregation plan. Under these arrangements, students have several school options: They can "(1) leave the school system, (2) accept the forced reassignment to a desegregated school, or (3) choose a desegregated magnet school" (Rossell, 1979: 308).

To date, few studies have attempted to assess the impact of desegregation techniques on desegregation success using a systematic, comparative research design. Most analyses of effects rely on case studies. Wegner and Mercer's (1975) study of 49 California unified school districts is a notable exception.³ As mentioned above, these authors combine six techniques into a "desegregation action index."⁴ To assess the impact of the desegregation techniques on their dependent variable (change in racial balance from 1966 to 1971), three analyses were performed. First, using a dichotomous variable (0/1), the researchers compared average (mean) changes in racial balance for those districts that used one of these techniques with those that did not. Second, a multiple correlation coefficient was

FIGURE 7. REDRAWING SCHOOL ATTENDANCE ZONES (REZONING)



*Dotted line depicts outline of original school zone.

SOURCE: Adapted from Larry Hughes, William Gordon, and Larry Hillman, Desegregating America's Schools. New York: Longman, 1980, p. 55.

calculated between desegregation actions and change. Finally, the desegregation action index was correlated with the dependent variable. In each analysis, the results were not statistically significant. Wegner and Mercer (1975: 134) conclude: "the number and kind of Desegregation Actions taken by a district does not significantly influence the extent to which that district will experience a change in the percent of minority children attending racially balanced schools." In other words, desegregation success may not be facilitated regardless of the strategy used.

For the desegregation planner responsible for formulating and implementing a desegregation plan, these findings are not very promising. The Wegner and Mercer (1975) study is, however, limited to California districts, and the only other comparative analysis of the effects of techniques on desegregation success (Kirby, et al., 1973) is based on data from the 1960s for northern districts only.

What about white flight? Do any desegregation techniques or features of the plan seem to affect white enrollment? Most of the systematic research on white flight does not take account of any features of the desegregation plan itself. Any effect of desegregation is determined altogether by using some measure of the change in racial balance occurring as a result of plan implementation. Yet Rossell (1981: 46-48) points out that certain characteristics of the desegregation effort may affect white enrollment. They include the following:

- o White reassignments to formerly black schools result in considerably more white enrollment loss than black reassignments to white schools.

- o The greater the busing distance, the greater the white flight, but only in the implementation years.
- o White flight is greater from elementary school desegregation than from secondary school desegregation.
- o Phased-in plans may result in greater white flight than plans implemented in one year because of the advance notice parents receive.

The data gathered for this project do not permit a test of all of these propositions. For example, efforts to gather reassignment data were unsuccessful. But, at least in a bivariate relationship, the effects of certain desegregation strategies on white enrollment can be ascertained.

It should be mentioned again that desegregation success is operationalized as the absolute change in the index of dissimilarity from the year prior to desegregation implementation (T-1) to implementation year (T). White enrollment change is a percentage figure based on the amount of change from the year desegregation was begun (T-1) to the year of implementation (T). In the analyses to follow, a difference in means test is used as the primary statistical technique to estimate the effects of each technique.

Strategies, Desegregation Success, and White Flight: Bivariate Analyses

For purposes of this research only five basic desegregation strategies were coded--voluntary student assignment (including voluntary open enrollment and majority to minority transfer), construction of new schools, pairing and clustering, magnet schools,⁵ and rezoning. This

decision was based on two considerations. First, previous research suggests that only a limited number of principal techniques are actually used. Second, the use of a larger number increases the likelihood that only a few districts will have used certain techniques. It would then be more difficult to separate out the effects of techniques from other characteristics of the district or the desegregation process. In other words, a proliferation of techniques makes it more difficult to generalize regarding the possible effectiveness of each one.

As mentioned previously different desegregation actions are often pursued at different grade levels. What is appropriate or potentially effective at the secondary level may not be so at the elementary level, and vice versa. So the bivariate analysis of techniques will divide the 52 districts into elementary and secondary schools.⁶ As discussed above, in a few instances desegregation was undertaken at only one level. For example, in this sample elementary school desegregation actions numbered 46, while 47 occurred at the secondary level. (Those districts implementing plans at only one level are shown as part of Appendix E.) An analysis of desegregation strategies should provide information by level as well as for the entire school system.

Initially, Table 5 offers a comparison that includes desegregation and white enrollment change by number of strategies used--two or fewer or three or more. As the data reveal, quite a few districts relied on only a small number of techniques, and perhaps surprisingly, such efforts produced better results than those instances where three or more were used. For the entire system, those using two or fewer had a mean change in desegregation level between T and T-1 of -34.0 (larger

TABLE 5

DESEGREGATION AND WHITE ENROLLMENT CHANGE
ACCORDING TO TOTAL STRATEGIES USED
FOR DISTRICTS AND BY SCHOOL LEVEL

Strategies	N	School Level							
		Systemwide		Elementary		Secondary			
		\bar{X}	\bar{X}	\bar{X}	\bar{X}	\bar{X}	\bar{X}	\bar{X}	\bar{X}
		Deseg. Chg. ^a	White Enroll. Chg. ^b	Deseg. Chg. ^a	White Enroll. Chg. ^b	Deseg. Chg. ^a	White Enroll. Chg. ^b	Deseg. Chg. ^a	White Enroll. Chg. ^b
≤ 2	23	-34.0	-7.9	29	-36.4	-11.8	32	-27.3	-2.6
≥ 3	27	-23.5*	-11.5	18	-18.0**	-12.6	14	-17.5*	-9.3*
TOTAL	50	-28.3	-9.8	47	-29.4	-12.1	46	-24.3	-4.7

*p < .05.

**p < .01.

^a Measured as the absolute change obtained by subtracting the desegregation score at T from T-1.

^b Percentage change from T-1 to T.

scores equal more change). This compares with a figure of -23.5 for districts using a greater number of techniques. The same thing holds for each separate level, but especially for elementary schools. The analysis suggests that the use of a number of specific approaches does not help, that in fact concentration on a few more potentially effective techniques is the better course of action.

Table 5 also shows that the fewer strategies employed, the lower the rate of white student loss (percentage change between T-1 to T), although the relationship is not statistically significant. By school level, however, important differences appear for secondary grades, where the difference in loss between fewer and greater number of techniques is 6.7 percent (-9.3% compared to -2.6%). No such differences appear for elementary schools.

Before assessing the effectiveness of various strategies it might be instructive to examine just which ones were most widely used, again by school level.⁷ Table 6 provides this comparison. Although a variety of combinations appear, only a limited number are extensively employed. At the elementary level, three techniques separately or in combination clearly predominate--rezoning (with 27% using that technique alone), pairing and clustering (25%), and pairing and clustering in combination with rezoning (20%). For secondary schools, only one strategy was heavily used--rezoning (61%). Further discussion will be confined to these more widely used strategies.

When desegregation success at the elementary level is examined in Table 6, pairing and clustering with rezoning produces the most change--a 40.5 absolute drop in the level of segregation. This

TABLE 6

THE EFFECT OF DESEGREGATION STRATEGIES ON DESEGREGATION SUCCESS
AND WHITE ENROLLMENT CHANGE BY 52 SCHOOL
DISTRICTS AND BY SCHOOL LEVEL

Strategies	School Level							
	Elementary				Secondary			
	N ^a	%	\bar{X} Deseg. Chg. ^b	\bar{X} White Enroll. Chg. ^b	N ^c	%	\bar{X} Deseg. Chg. ^d	\bar{X} White Enroll. Chg. ^d
Vol. assign.	1	2	-	-	1	2	-31.1	-9.6
Const. new school	-	-	-	-	1	2	-24.3	-8.9
Pair./Clust. (P/C)	12	25	-35.9	-13.0	1	2	-18.5	-11.0
Magnet	2	4	-9.3	-23.6	1	2	-4.0	-0.7
Rezoning	14	27	-31.6	-15.4	29	61	-27.8	-2.2
P/C-Rez.	10	20	-40.5	-5.8	2	4	-44.2	0.0
Vol.-P/C-Rez.	2	4	-3.8	-7.6	1	2	-0.1	-4.5
Vol.-P/C-Mag.-Rez.	-	4	-	-	1	2	-22.8	-6.9
Vol.-Rez.	2	4	-33.4	-5.4	1	2	-22.1	0.0
Vol.-Const.-P/C-Rez.	1	2	-2.8	-37.5	1	2	-6.6	-10.8
Const.-Rez.	2	4	-11.7	4.6	2	4	-9.4	6.7
Mag.-Rez.	1	2	-1.6	-15.5	4	9	-13.9	-19.4
Vol.-Mag.-Rez.	-	-	-	-	1	2	-12.9	-13.3
Const.-P/C-Rez.	1	2	-2.2	-11.7	-	1	-	-
Vol.-Mag.	1	2	-22.4	-21.1	2	4	-18.1	-13.4
TOTAL	50	100	-29.4	-12.1	48	100	-24.3	-4.7

TABLE 6 CONTINUED

^aTwo districts' desegregation efforts (Stockton and Colorado Springs) did not include elementary schools.

^b(N=47). Five cases were not included in the analysis: Stockton and Colorado Springs (see note a); Peoria and Tacoma (no T-1 desegregation time point); Corpus Christi (missing data).

^cDesegregation in four districts (San Francisco, Lansing, Pontiac, Clark County) did not include elementary schools.

^d(N=46). Six cases were not included in the analysis: San Francisco, Lansing, Pontiac, Clark County (see note c); Peoria and Tacoma (no T-1 desegregation time point).

is closely followed by the 35.9 point change reflected for pairing and clustering alone. Rezoning as a primary technique also does well, with an absolute decline in racial isolation of 31.6 points. Tentatively then these three strategies alone or in combination seem to work well. The most improvement in racial balance for elementary schools, of course, is associated with pairing and clustering with rezoning.

Table 6 also shows white enrollment change by strategy for the two levels. First, for elementary schools the average decline in white enrollment during the desegregation year was 12.1 percent. This compares with the average loss for the year preceding desegregation of 4.9 percent (now shown in the table; N=43). Also, for the year following plan implementation the average decline among elementary grades is 5.1 percent (also not shown; N=39). The range of white enrollment change among the districts at implementation year is considerable--from one school system with no decline to one with a 37.5 percent drop. The range is much narrower, however, for the three most frequently used techniques. Pairing and clustering with rezoning, the most effective desegregation strategy, also reflects the lowest level of white flight of the three, 5.8 percent. Pairing and clustering is associated with a decline of 13.0 percent, while rezoning shows a 15.4 percent drop. This relatively low degree of white loss found with pairing and clustering with rezoning would certainly seem to enhance its position as the most desirable strategy for elementary schools.

Turning to desegregation success at the secondary level (in Table 6), as noted above, rezoning is the overwhelming choice (61%), and this technique brings an absolute reduction in segregation of 27.8

points. This is not the largest reduction for all techniques, which is 44.2 points for pairing and clustering with rezoning, but only two secondary schools use this combination approach. This small number, as mentioned above, makes it more difficult to generalize about the effectiveness of this particular combination.

What relationship exists between strategies and white enrollment change at the secondary level? As Table 6 shows, the overall white loss at this level, 4.7 percent, is considerably less than exists for elementary schools. One year pre-desegregation loss is .3 percent, while one year after implementation the loss continues at 2.1 percent (not shown in Table 6). The technique employed by most of the districts (rezoning) is associated with an even lower level of white decline, 2.2 percent. Certainly nothing here suggests that rezoning should be avoided because of any potential negative effect on white enrollment.

One further comparison of strategies might be useful. Table 7 contrasts the effects of each of the most frequently used techniques (under base group) with all others that are used (comparison group), by school level. Consider desegregation change at the elementary level, for example. The 12 districts using pairing and clustering reflect a 35.9 point decline in level of segregation. This contrasts with the 27.1 drop for the remaining 35 schools employing all other techniques. Actually, the information on the left-hand side of the table (for the base group) also appears in Table 6. But Table 6 offers no direct way of showing how each technique fares against all others combined. Table 7 offers this comparison. In brief, Table 7 confirms again for the elementary level that pairing and clustering combined with rezoning

TABLE 7

EFFECTS OF PRIMARY DESEGREGATION STRATEGIES COMPARED TO
ALL OTHERS BY SCHOOL LEVEL

<u>Elementary Level</u>										
<u>All</u>			<u>Base Group</u>				<u>Comparison Group</u>			
N	\bar{X} Deseg. Chg.	\bar{X} White Enroll. Chg.	Strate- gies	N	\bar{X} Deseg. Chg.	\bar{X} White Enroll. Chg.	Strate- gies	N	\bar{X} Deseg. Chg.	\bar{X} White Enroll. Chg.
47	-29.4	-12.1	P/C	12	-35.9	-13.0	All Others	35	-27.1	-12.0
47	-29.4	-12.1	Rezon.	13	-31.6	-15.4	All Others	34	-28.5	-10.8
47	-29.4	-12.1	P/C Rezon.	10	-40.5	-5.8	All Others	37	-26.4*	-13.8
<u>Secondary Level</u>										
46	-24.3	-4.7	Rezon.	29	-27.8	-2.2	All Others	17	-18.5*	-8.8*

*p < .05.

produces the most effective desegregation results. For secondary schools Table 7 also shows that the 29 districts using rezoning achieve more desegregation change (-27.8) than those using all other techniques (-18.5). These results also confirm the earlier findings regarding white flight. The most effective technique for elementary schools (pairing/clustering with rezoning) shows much less white enrollment loss (5.8%) than do all other techniques (13.8%). This particular comparison highlights even more how little white flight (2.2%) is associated with rezoning compared to all other techniques (8.8%).

Busing might be considered as a separate desegregation tool (see Wegner and Mercer, 1975). No doubt some efforts to achieve a unitary school system result in sizable increases in student transportation. Yet seldom do courts order busing per se; ordinarily more transportation must be provided by the district to implement the requirements of a specific plan. Nonetheless, one might assume that an increase in busing would be associated with greater desegregation success. In fact, Orfield (1978: 137) cites evidence to show that in many places with very little additional busing the amount of school desegregation could be greatly increased.

Information on busing was collected for the 52 districts in this study. In particular, an attempt was made to gauge the increase in student transportation resulting from desegregation. This turned out to be one of the most difficult data gathering tasks of the project. Many written reports do not provide before and after data on busing, and busing information by school level is virtually nonexistent. This void in the published literature required that a number of telephone

calls be made to various districts. In some instances, school officials were asked to provide busing information from ten years ago. Fortunately some officials had such data and provided it. Others either did not have it or for whatever reason would not give it. The result is that when the busing increase variable is included in the analysis, the N is reduced to 44. One further comment should be made regarding the busing measure. This was scored on a basis of 0 to 20, generally corresponding to a percentage increase. That is, a score of 10 would indicate a 100 percent jump in busing. The upper limit of 20 was established to handle one or two very large increases that otherwise might have to be treated as outliers and removed from the analysis.

Table 8 provides one way of assessing the effects of busing. The districts are divided at the median increase (4 or about 40%), and comparisons are made between one group above and one group below the median. The table shows the pre-desegregation DI score, the implementation year score, and two change measures. Those districts with more busing experience slightly greater reduction in racial isolation (an absolute change of -31.7 compared to -26.7), but it is not statistically significant. Since the busing increase score ranges from 0 to 20, a correlation coefficient has also been calculated-- $r = .14$ (not significant). Thus, somewhat surprisingly, increases in busing are only modestly associated with desegregation success.

White enrollment is also somewhat related to busing as shown in Table 8. Those districts with an above average increase in student transportation show no loss of white students prior to desegregation. At implementation those districts lose an average of 10.8 percent of

TABLE 8

BUSING INCREASE, DESEGREGATION CHANGE, AND
WHITE ENROLLMENT CHANGE

Variable (+ Time Point)	Busing Increase		
	All	Below Median ^b	Above Median ^b
Deseg. score year prior to implem. (T-1)	65.1(N=44)	66.5(n=25)	63.3(n=19)
Deseg. score implementation year (T)	36.8(N=46)	40.5(n=27)	31.6(n=19)
Deseg. score absolute change	-28.9(N=44)	-26.7(n=25)	-31.7(n=19)
Percent white enrollment change (T-2 to T-1)	-1.7(N=37)	-3.1(n=19)	0.0(n=18)
Percent white enrollment change (T-1 to T)	-9.7(N=44)	-8.8(n=25)	-10.8(n=19)
Percent white enrollment change (T to T+1)	-2.9(N=37)	-2.2(n=22)	-3.8(n=15)

^aBusing change was recorded on a scale of 1 to 20, with numerical values generally corresponding to percentage differences.

^bMedian=4.0.

white enrollment. This compares with an implementation year loss of the below average group of 8.8 percent. But this second group reflects a 3.3 percent loss for the preceding year. So the net loss is only 5.5 percent, considerably smaller than the loss figure for those with more busing. Also somewhat unexpectedly, the below median group has a post-implementation year loss of only 2.2 percent, actually lower than the figure of 3.1 percent for the year prior to desegregation. The above average group shows a 3.8 percent loss for the year after which, of course, compares with the 0 figure for the before desegregation year.

This preliminary analysis in which only two groups are compared should be considered as suggestive. With that caveat, the findings imply that increases in busing may not produce much desegregation change. Also, the results suggest that more busing might tend to accelerate white student outmigration.

Summary

This bivariate analysis of desegregation strategies is limited, since it does not take account of a variety of other influences that can affect desegregation success. The multivariate analysis of desegregation change will incorporate a number of other explanatory measures as a way of putting strategies into the proper context. Yet this preliminary analysis does provide certain information that might be useful to both the desegregation planner as well as those who wish to understand the process better. For example, previous research suggests that such factors as the size of district, percentage minority, and especially the degree of external pressure primarily

determine the degree of desegregation success. But unlike others, this analysis suggests that specific techniques may also make at least a modest difference.

Those elementary schools using rezoning in combination with pairing and clustering not only achieved a greater reduction in racial isolation than those districts using other techniques, such schools also had less white enrollment loss. A comparable development appeared for secondary schools. Rezoning was the overwhelming choice of secondary schools, and compared to those using other strategies, districts using this approach reflected a greater degree of desegregation success. Additionally, white flight was lower with this technique than with the others.

Busing was also considered as part of this bivariate analysis. When districts were divided at the median of a measure of busing increase, those above the average had somewhat greater desegregation success. Increases in busing also showed some modest relationship with white enrollment change: the more busing, the more white loss. As discussed above, the available data for busing and the bivariate method of analysis necessitates that considerable caution be exercised in interpreting these findings.

A school district or an educational consultant for the district or the court cannot arbitrarily impose a preconceived plan on a group of elementary schools. The particular needs and requirements of the district must be taken into account. Yet, this research suggests that where possible responsible officials might consider first the combination of rezoning with clustering and pairing of

various elementary grades. At the secondary level, rezoning might be considered as the strategy of first resort.

For scholars of desegregation, the study emphasizes that different desegregation techniques are used across school levels with varying degrees of success. Thus, future assessments of the effectiveness of desegregation strategies in reducing racial isolation should incorporate appropriate designs to capture this variation.

NOTES

1. Vergon also lists interdistrict or metropolitan plans as a third general type of desegregation strategy.
2. Hughes, Gordon, and Hillman (1980: 19) advance a similar argument.
3. For two other studies that attempt to systematically assess the effect of desegregation strategies see Kirby, et al., 1973 and Rossell, 1979.
4. The desegregation action index did not take into account the degree to which each of the six techniques were used, only if they were used or not used.
5. The case survey instrument allowed the separate coding of magnet-only and magnet-mandatory plans. A preliminary analysis revealed, however, that (contrary to Rossell, 1979) there was almost no difference in the relationship of the two with desegregation success. Thus the two were combined into a single measure.
6. The OCR data being used in this analysis contain separate desegregation measures for two levels only. By interpretation it was also possible to determine the category to which junior or middle schools has been assigned. For our 52 districts the junior or middle schools were assigned to the secondary level.

7. For both levels these techniques represent the primary but not exclusive ones used by particular districts. This was determined by the extensiveness of use as measured by the analyst-reader's interpretation of the case study.

CHAPTER V

EXPLAINING DESEGREGATION CHANGE:

A MULTIVARIATE ANALYSIS

Introduction

Success in achieving a racially balanced school system depends on considerably more than the desegregation technique used. As the review of the implementation literature and previous research showed, a host of local and extralocal influences may also affect school desegregation efforts (see Chapter 2). This chapter attempts to assess the independent effect of the influences shown in Figure 4 (see p. 70) on desegregation success. The chapter is comprised of three sections. In section one the relationship of each element found in the three blocks of predictor forces (shown in Figure 4)--extralocal influences, school district characteristics, and desegregation process variables--with school desegregation is discussed. The determinants of desegregation success systemwide as well as by school level (elementary and secondary) are identified in section two. Finally, in the third section, the chapter is summarized and implications are discussed.

School Desegregation Determinants

As Figure 4 showed, three types of influences may affect school desegregation success--external, school district, and desegregation process. The discussion to follow will be oriented around this set of influences.

External Influences

Because of historic and legal reasons, region has been a major factor in school segregation from the beginning. Before the concerted action of the federal courts at the end of the 1960s, southern schools had made little headway with desegregation. Since that time, the South has borne the brunt of federal pressure, through both the actions of HEW and the Department of Justice operating through the courts. So these two major external conditions--region and federal pressure--have been prominently associated in the course of so much desegregation action over the past decade or so. While which of the two sources of federal impetus is the most efficacious has been debated (see Bullock and Rodgers, 1976; Rossell, 1978b: 156), there is little disagreement that federal pressure brings more desegregation (Farley, 1975a; Giles, 1975a; Fitzgerald and Morgan, 1977b).

Whether or not southern schools achieve greater racial balance upon desegregation than northern schools is not certain, however. Fitzgerald and Morgan's (1977b: 448) comparison of the desegregation levels for 1968 and 1972 among a large group of northern and southern cities shows that districts in the South made much greater changes over the four-year period. But that comparison can be

misleading. The 1968 and 1972 segregation scores for their 114 northern cities changed hardly at all, indicating that few had actually desegregated. The South reflects large segregation score differences for 1968 and 1972 because so many southern districts had been forced to act during that period. Nevertheless, southern region is expected to be positively related to desegregation success.

School District Characteristics

School district characteristics represent a second basic set of environmental forces affecting the effort to achieve racially balanced schools. Several district features would seem important, in particular the type of district (countywide or noncountywide), district size, and percentage minority. Each of these will be considered briefly.

Many observers think an areawide approach to desegregation may be the only effective remedy for large urban areas (U.S. Commission on Civil Rights, 1977b:11-12). Without access to predominantly white suburbs, it may be virtually impossible to achieve desegregation where central city minority enrollment is high. Nonetheless, since the Milliken v. Bradley decision in 1974, the courts have been reluctant to compel metropolitanwide desegregation. Regardless of the court's position, something approximating areawide desegregation exists in some communities. In a number of southern states especially, school districts are organized on a countywide basis. In effect, the absence of white suburban districts means that those who want to avoid desegregation must either choose a private school or perhaps leave the state. Countywide districts are thought to be a useful deterrent to white

student outmigration. Thus, countywide districts may desegregate more successfully than noncountywide districts because they tend to have a higher proportion of whites initially and experience less white flight (Hawley, et al., 1981: 40). The expectation here is that countywide districts will reflect more improvement in desegregation levels than noncountywide districts following the implementation of a desegregation effort.

Two other features of the school system may contribute significantly to desegregation success--the size of the district and the proportion minority. Almost every study agrees that the proportion minority substantially affects white public school enrollment. Evidence is strong that, at least prior to desegregation, the larger the proportion black the higher the level of school segregation (Dye, 1968; Farley, 1975a). It should be noted, however, that as federal intervention occurs, percentage minority pupils in a district becomes a considerably less important influence at least in southern school desegregation (Giles, 1975a; Fitzgerald and Morgan, 1977b). Since districts with high minority enrollment should evince more segregation initially, they may show more change in levels of segregation after a plan has been implemented.

Size of district may affect the desegregation process primarily for physical and logistical reasons. Districts with large enrollments may find it more troublesome to work out the complicated arrangements for transporting students. In fact, several studies (Giles, 1975a; Farley, 1975a; Fitzgerald and Morgan, 1977b) find the larger the district, the higher the initial level of segregation.

Again, however, this relationship may be attenuated where desegregation occurs under federal coercion (see Morgan and Fitzgerald, 1980). Still, for purposes of this analysis, the expectation is that more desegregation success will be shown among smaller rather than larger districts.

Desegregation Process Variables

Figure 4 depicts an additional set of forces that should directly affect desegregation success. In fact, these influences might be divided into two groups--desegregation process variables and desegregation strategies. Since the preceding chapter dealt at some length with strategies, the discussion here will focus on just those variables associated with the desegregation process itself. In particular, attention will be devoted to the attitudes toward desegregation on the part of the school board and superintendent, citizen involvement in the process, and the views of other local elites (including the press). Two other measures associated with the board and superintendent will also be examined--whether or not a new superintendent was hired during the desegregation effort and the degree of political insulation of the local school board. Each of these will be discussed briefly in turn.

First, the school administration may play a key role in the desegregation process (see U.S. Commission on Civil Rights, 1976: 73-74). Even though most of the cases studied here involve mandatory efforts, the degree of cooperation, if not support, of the local school officials may considerably facilitate or impede the creation and implementation of an effective plan. In fact, among the 52 districts, the desegregation

effort was initiated voluntarily by the school board 15 percent of the time. Even where plan implementation is the only part played by the school administration, foot dragging and other recalcitrant actions by local officials are possible, all of which may adversely affect the ultimate outcome. In short, supportive school officials should be associated with higher levels of desegregation success.

What about the larger public, does it have much effect on school desegregation? This potential relationship will be tested in two ways. First, if the general white citizenry becomes interested in the process, it seems likely that this concern will be manifested by opposition and protest. Whether this resistance has any real effect is questionable. Intuitively one might assume that an aroused and irate citizenry might be able to at least slow down desegregation if not get certain objectionable features of the plan changed. Yet Rodgers and Bullock (1976a: 43) report that organized white opposition had a negligible impact on desegregation. In effect, it came too late. As the authors put it, "The tardiness of organized opposition rendered it futile." They do acknowledge, however, that unorganized opposition may well have taken its toll at an earlier time by creating delays and perhaps contributing to the official reluctance to act until federal pressure became compelling. Kirby, et al. (1973: 125) observe that, among their group of 91 northern communities, white opposition was actually associated with greater desegregation success. Again, they agree that white resistance is ineffective since it comes after the fact. "By the time citizens have rallied to protest a decision, the die is cast." Still it would seem this relationship is worth testing

for the 52 districts included in this study. An index of white resistance was created through factor analyzing eight survey items pertaining to citizen and elite involvement (see Table 2, Chapter 3). Resistance is expected to have a minimal effect on desegregation success.

Citizens may be involved in desegregation in another way--by serving in some official or semi-official advisory capacity to the local board or the court (a committee of 100, for example). Several questions were included in the survey instrument asking about the degree of officially sanctioned citizen participation in either plan formulation or plan implementation. Factor analysis was used to create an index of citizen participation. The expectation is that this form of citizen involvement should be positively related to desegregation progress among the various districts.

Several studies suggest that community elite support may facilitate the desegregation process (see Kirby, et al., 1973: Chap. 8; U.S. Commission on Civil Rights, 1976: 75; Hawley, et al., 1981: 66-67). The argument is as follows. Elite endorsement may minimize negative citizen reaction. Kirby, et al. (1973: 132) find that where elites favor desegregation, the masses follow. Undoubtedly, such commitment may also provide valuable help to local officials who might be less inclined to move boldly if they feared they might be isolated or even ostracized from important community leaders. The local media might also be considered as part of a community elite. In many ways it serves a similar purpose with regard to a local issue such as school desegregation by helping to shape public opinion and generate support or opposition to the plans of school officials. Again, an index of elite support was

generated through factor analysis. To the extent elites favored the desegregation effort, greater success should have been achieved.

Two other process measures are used. The first is the hiring of a new superintendent. Rodgers and Bullock (1976a: 44) observe that changing a superintendent may expedite the demise of dual school systems in the South. Apparently bringing in new leadership can hasten the process of desegregation. The second variable is one labeled school board insulation. Certain governmental characteristics of the local school system make school board members less immediately accessible and less potentially responsive to citizen influence. For example, the fewer the meetings, presumably the less opportunity the public has to confront board members over unpopular issues. The assumption is that school boards somewhat insulated from popular access are in a better position to act contrary to mass opinion. Several studies (Crain, et al., 1968; Kirby, et al., 1973) suggest that where sensitive or controversial issues are under consideration, action by local governments is easier where public participation is minimized. Thus, it is expected that the greater the board insulation the higher the level of desegregation success.

Multivariate Analysis

Systemwide

The multivariate analysis of desegregation success will include the effects of various influences systemwide as well as by school level. Table 9 shows the systemwide analysis to include the simple correlation (r), the beta weight (standardized regression coefficient), the t scores

TABLE 9

EFFECTS OF VARIOUS INFLUENCES ON DESEGREGATION CHANGE
AT SYSTEMWIDE LEVEL (N=50)

Blocks of Variables	r	Beta	t-score
<u>External Influences</u>			
Region ^a (0/1)	.23	.27 (9.38) ^e	1.64
Federal coercion ^b	.37	.44 (3.73)	3.19**
<u>School District Characteristics</u>			
Type of district ^c (0/1)	.40	.27 (9.18)	1.46
Percent minority ^d	-.26	-.01 (-.008)	.04
Size of district	-.12	-.40 (-.0001)	2.64**
<u>Desegregation Process Variables^b</u>			
Supt. and school board support	.26	.29 (5.66)	2.18*
Citizen participation	-.03	.02 (.335)	.14
Elite support	.02	.04 (.762)	.28
Hiring new superintendent	.04	.21 (7.83)	1.63
School board insulation	.26	-.04 (-1.15)	.32

* p < .05

** p < .01

$R^2 = .46$; $\bar{R}^2 = .32$; $F = 3.28^{**}$ with 10 and 39 degrees of freedom.

^aNon-South/South.

^bFor operationalization see Table 2, pp. 98-100.

^cNoncountywide/countywide.

^dTotal school enrollment.

^eUnstandardized regression coefficients.

(to determine the level of statistical significance), and the R^2 (total explained variance). After a brief consideration of the zero-order associations, the primary concentration will be on the beta. This statistic indicates how much change in level of segregation can be attributed to a one standardized unit of change in an independent variable, when all other variables are statistically held constant. In short, the beta indicates the relative importance of each variable within the equation.

First, the simple correlations at the systemwide level are examined¹ (see Table 9). Several variables show fairly strong relationships with desegregation success. Type of district ($r=.40$) and federal coercion ($r=.37$) are the two strongest. Countywide districts reflect considerable achievement. Likewise, the more involved the federal government, the more desegregation change occurs. Several other correlations might be mentioned. Southern districts manifest more progress in creating unitary schools than did those in the non-South ($r=.23$). As expected, the greater the minority percentage, the less change took place ($r=-.26$). Only three desegregation process variables show enough simple association with desegregation success to warrant mention. Superintendent and board support is of some consequences; the more support, the more racially balanced the schools ($r=.26$). Likewise, the more the board was shielded from direct citizen pressure (board insulation), the higher the level of desegregation success ($r=.26$). Finally, one other correlation should be noted that is not shown in Table 9. Desegregation resistance covaries positively with desegregation change ($r=.27$). This suggests that, not only is

opposition not effective, it probably arises in reaction to the desegregation effort. The more racial isolation is reduced, the greater the tendency of whites to protest. This particular relationship is not included in the table for reasons discussed below. None of the other simple relationships are especially noteworthy, except in some instances where they did not prove to be as closely associated with desegregation success as expected. In that regard, size of district did not prove to be as conspicuous as had been expected ($r = -.12$). Previous research has found that elimination of dual school systems is especially difficult for those districts with large total enrollments. As will be shown below, however, district size does become quite potent in the multivariate analysis.

The results of the initial multiple regression analysis are also shown in Table 9. The equation for desegregation success at the systemwide level shows three statistically significant explanatory variables with a total explained variance (R^2) of 46 percent ($\bar{R}^2 = .32$).² Both measures in the external influence block are important. In fact, federal coercion ($\beta = .44$) is the most powerful single effect in the equation. Region is also of some consequence with a standardized regression coefficient of .27 (not significant). Both are in the same direction as for the bivariate case indicating that, when other variables are taken into account, federal involvement produces more change and greater success occurs among southern than northern districts.

Two of the three school district characteristics are influential as well. In fact, size of district ($\beta = -.40$) is the second most powerful effect of all under controlled conditions. The

direction is as hypothesized: large districts have more trouble desegregating. While not significant statistically, type of district with its standardized slope (beta) of .27 is of some consequence. Countywide districts produce better results all other things considered. Percent minority should be noted. With other measures held constant, the effect of this variable virtually disappears (beta = -.01). This confirms previous research indicating that when other forces enter in, the potential barrier of a large minority enrollment largely evaporates.

One of the five desegregation process measures reflects statistical significance. If desegregation resistance had been kept, it too would have been significant. Since the ordinary least squares regression techniques used here do not allow reciprocal causation, the resistance variable should not be used to predict desegregation success. As suggested above, this development comes after the fact. If this measure had been included, however, the R^2 for the equation would rise to .54 ($\bar{R}^2 = .41$). Superintendent and board support is of considerable import, and in the expected direction (beta = .29; statistically significant). Also, as others have shown, the hiring of a new school superintendent may also contribute to desegregation success (beta = .21). Citizen participation, elite support, and school board insulation do not seem to make much difference when all factors are taken into account. Since the specific techniques are applied at each school level separately, they are not included as part of the systemwide analysis.

The desegregation literature also suggests that three other variables may influence local desegregation efforts. First, the degree to which a community (school district) is residentially segregated

may affect efforts to end racial isolation (see Farley, 1975b; Fitzgerald and Morgan, 1977b). Second, if busing is employed as part of the over-all local effort to end racial isolation, desegregation success should be enhanced, so the argument goes. As Orfield (1978: 118) puts it:

"Often the only choice is the one people most wish to avoid--busing or segregation." Finally, previous literature suggests (see Kirby, et al., 1973; Wegner and Mercer, 1975) that the total desegregation activity (i.e., number of strategies employed) in a district is not, or is only moderately, related to desegregation success. Data are available in this study to offer a limited test of these arguments. When these three variables--residential segregation,³ busing increase,⁴ and the total number of techniques used--were added to the systemwide equation in Table 9, the following results emerged:

- o An increase in busing as a part of a local desegregation effort is positively but not significantly (.05 level) associated with desegregation success ($r=.14$; $t\text{-score} = .14$).
- o The greater the number of desegregation strategies employed by a district the less desegregation success ($\beta = -.24$; not significant at .05 level).
- o Residential segregation is positively and significantly (.05 level) related to desegregation success ($\beta = .37$; $t\text{-score} = 1.99$).
- o The N size is reduced from 50 to 38 in this supplementary analysis (data are missing on two of the three variables--busing and residential segregation).

- o The predictive power (R^2) of the equation is increased from .46 to .59 (\bar{R}^2 = .32 to .38).

In sum, increases in busing and the number of desegregation strategies employed by districts are only weakly to moderately related to desegregation success. In fact, the more strategies used, the less progress made. In contrast, high levels of residential segregation are positively related to desegregation success, a finding that may be explained best by the substantial gains made in southern communities in reducing separation in the schools.

These three variables were not retained in the regression equation reported above for several reasons. First, preserving as many of the cases as possible was considered vital. Second, finding residential segregation positively related to desegregation success raises questions regarding what the residential segregation variable represents. A priori, one might expect reducing racial isolation in the schools to be more difficult in heavily segregated communities. Farley (1975b: 192) states that residential segregation makes school desegregation harder because it increases the necessity for busing, which the white community vigorously resists. But here more success is found among districts that are segregated, contrary to expectations. This suggests that residential segregation is serving as a proxy for some other situation or influence, southernness probably,⁵ and should not be used to "predict" desegregation success. Finally, once it has been established that the desegregation activity score index is negatively related to desegregation success, it is more productive to search for those specific strategies or combination of strategies that facilitate school desegregation.

Elementary Level

Table 10 provides the analysis for elementary schools only. It should be mentioned again that only a few of the 52 districts desegregated at just one level. This means that, with the exception of the desegregation technique variable, the values of the other predictor variables in this equation are virtually the same as for the systemwide analysis. The dependent variable, however, represents a separate calculation of the dissimilarity index for each level. For example, the year prior to desegregation, elementary schools had a desegregation score of 69.6 compared to a figure of 59.5 for secondary schools. Following the effort to achieve a unitary system, elementary schools dropped to a segregation level of 40.8, a difference of 29.4. At the secondary level, for the year of desegregation the score was 35.3, which indicates an absolute change of 24.3 points. In brief, among the group of 52 schools the initial level of segregation was higher at the elementary level, but somewhat more change was achieved there than for the secondary level.

Now back to the findings in Table 10. The major differences between the elementary and systemwide level will be highlighted. First, less variance can be accounted for at the elementary level ($K^2 = .36$; $\bar{R}^2 = .16$) compared to the systemwide analysis ($R^2 = .46$; $\bar{R}^2 = .32$). And none of the predictor variables reach statistical significance. As far as individual predictor variables are concerned, somewhat surprisingly, the most important at the elementary is not federal pressure but type of district (with a beta of .30). For the primary grades, countywide districts do especially well. Federal coercion is the next most prominent effect (beta = .23), followed by size of district, superintendent and board support, and the hiring of a new superintendent.

TABLE 10

EFFECTS OF VARIOUS INFLUENCES ON DESEGREGATION CHANGE
AT ELEMENTARY SCHOOL LEVEL (N=47)

Blocks of Variables	r	Beta	t-score
<u>External Influences</u>			
Region ^a	.15	.13 (5.01) ^f	.62
Federal coercion ^b	.29	.28 (2.71)	1.58
<u>School District Characteristics</u>			
Type of district ^c	.31	.30 (11.62)	1.41
Percent minority ^d	-.24	.02 (.024)	.10
Size of district ^d	-.17	-.25 (-.0001)	1.30
<u>Desegregation Process Variables</u>			
Supt. and school board support	.19	.23 (4.88)	1.47
Citizen participation	-.11	-.03 (-.59)	.20
Elite support	.10	.16 (3.78)	1.07
Hiring new superintendent	.07	.20 (8.26)	1.30
School board insulation	.23	-.01 (-.38)	.10
<u>Desegregation Technique</u>			
Pairing/clustering and rezoning (0/1) ^e	.20	.19 (8.91)	1.10

* p < .05

** p < .01

 $R^2 = .36$; $\bar{R}^2 = .16$; $F = 1.76$ with 11 and 35 degrees of freedom.
^aNon-South/South.^bFor operationalization see Table 2, pp. 98-100.^cNoncountywide/countywide.^dTotal school enrollment.^eDid not use/used.^fUnstandardized regression coefficient.

In general, the basic influences are quite similar when the elementary-level findings are compared to those for both levels combined, except for two things. Less variance can be explained, and federal coercion is not quite as powerful, relatively speaking. Neither of these two developments are easily explained. Since almost no one else has done a separate analysis by school level, these findings cannot readily be compared to those of other studies. One possibility does come to mind, nonetheless. Apparently parents become more concerned, if not threatened, when desegregation comes to the early grades (see Hawley, et al., 1981: 17). This is manifested in part by the greater degree of white withdrawal from elementary as opposed to secondary schools (see the previous chapter, Table 6). This outmigration may also be complicated by the "nonentrance" of white families who have young children and wish to avoid desegregated schools. Rossell (1981: 20) reports that at least in one city, evidence shows that some white families moving into a desegregated system tended to place their children in private schools. This may be especially likely where young children are involved. No doubt the variables used here are not very effective in capturing these more subtle behavioral processes that affect the ultimate desegregation outcome.

The other notable difference at the elementary level concerns the relatively less critical role of federal coercion. Again perhaps even the federal courts are not as eager to push for extensive change in the lower grades for fear of further antagonizing white parents. The relatively greater import of countywide districts may have more to do with the differences in choices afforded parents of young children than

anything else. The absence of segregated suburban districts may offer parents few alternatives unless they can afford private schools. Thus, avoidance becomes more difficult, contributing to the overall success of the desegregation effort.

The analyses by level also contain one additional feature--the effects of the most promising desegregation strategy (see Table 7). In this case, the variable indicates whether or not the district used pairing/clustering and rezoning as the principal technique. Initially, it might be mentioned that the simple correlation between desegregation change and this technique ($r=.30$) is among the strongest for any predictor variable. Yet when this measure is included with all the others, it does not reach statistical significance. It does add 2 percent to explained variance, however. And its beta weight of .19 is the sixth largest, suggesting that the use of this particular technique does contribute to greater success. In fact, the unstandardized regression coefficient of 8.91 means that if a district uses this strategy at the elementary level it would expect to lower the level of segregation by about nine points,⁶ even with all the other influences in the equation taken into account. This is not an inconsequential amount, suggesting again that at least for elementary schools, the specific technique does matter.

Secondary Level

The analysis of desegregation change at the secondary level is found in Table 11. Again, the differences between these results and those at the systemwide level will be emphasized. In fact, only one

TABLE 11

EFFECTS OF VARIOUS INFLUENCES ON DESEGREGATION CHANGE
AT SECONDARY SCHOOL LEVEL (N=46)

Blocks of Variables	r	Beta	t-score
<u>External Influences</u>			
Region ^a	.35	.35 (11.77) ^f	2.07*
Federal coercion ^b	.40	.50 (3.85)	3.72**
<u>School District Characteristics</u>			
Type of district ^c	.46	.20 (6.43)	1.10
Percent minority ^d	-.26	.00 (-.002)	.00
Size of district	-.13	-.41 (-.0001)	2.89**
<u>Desegregation Process Variables^b</u>			
Supt. and school board support	.27	.34 (6.01)	2.61**
Citizen participation	-.04	.03 (.490)	.24
Elite support	-.04	-.05 (-1.05)	.44
Hiring new superintendent	-.12	.04 (1.47)	.33
School board insulation	.22	-.13 (-3.37)	1.00
<u>Desegregation Technique</u>			
Rezoning ^e	.29	.09 (3.01)	.72

* p < .05

** p < .01

$R^2 = .55$; $\bar{R}^2 = .41$; $F = 3.85^{**}$ with 11 and 34 degrees of freedom.

^aNon-South/South.

^bFor operationalization see Table 2, pp. 98-100.

^cNoncountywide/countywide.

^dTotal school enrollment.

^eDid not use/used.

^fUnstandardized regression coefficient.

main dissimilarity appears. Among the group of secondary schools, hiring of a new superintendent helps very little ($\beta = .05$). Otherwise, at the secondary level the basic forces shaping desegregation success parallel those for the system as a whole: federal coercion has clearly the most powerful effect followed by size of district.

The technique of rezoning (used or not used) has also been added to the equation to account for variation in desegregation success among secondary schools. In this case rezoning makes little difference. Even though the simple correlation is .29, the β is only .09 (not statistically significant), and this variable adds nothing to explained variance. If the unstandardized regression coefficient is examined, it shows that the use of rezoning, as opposed to other techniques, should produce an average decline in segregation levels of about three points.⁷ Even though including the desegregation tool in the analysis does not help much, the overall equation predicts desegregation success better at the secondary than the elementary level, $R^2 = .55$ ($\bar{R}^2 = .41$). This lack of additional explanatory power for rezoning tends to confirm the earlier bivariate analysis of strategies when elementary and secondary schools are compared. When the most effective strategy at the elementary level (pairing/clustering with rezoning) is employed, somewhat greater desegregation success seems to occur than when rezoning is used at the secondary level. Apparently the application of particular techniques as opposed to others is somewhat more compelling when lower grades are being desegregated as opposed to upper grades.

Summary

This chapter has offered a multivariate analysis of desegregation change among 52 large school districts based on a school desegregation implementation model. The model postulates that external forces (federal coercion and region), school district characteristics (size of district, percent minority, type of district), and desegregation process variables (e.g., strategies, citizen participation, school board support) affect the degree to which a district may improve its racial balance. The major feature of this analysis distinguishing it from previous efforts lies with the inclusion of the process and strategy measures. Most past attempts to account for desegregation change have not been able to capture these possibly significant forces. The use of the case survey method has enabled this analysis to incorporate these otherwise difficult to obtain data.

The analysis was performed at the systemwide level as well as separately for elementary and secondary schools. The analysis by level was essential to permit the inclusion of the various desegregation techniques, which vary in their use by school level.

At the systemwide level the following influences were especially salient in helping to account for desegregation success (when all other factors were taken into account):

- o Federal coercion was the single most powerful force in producing racially balanced schools.
- o Greater change in segregation levels occurred in southern rather than northern districts.

- o Larger districts (based on enrollment) has less desegregation success than smaller districts (the second most potent influence).
- o Countywide districts moved further toward unitary school systems than noncountywide districts.
- o Support by school officials tended to improve the prospects for desegregation success.
- o Hiring a new school superintendent helped achieve desegregation progress.

Certain differences appeared when the analysis was performed by school level. For elementary schools the most important predictor of desegregation success was type of district (countywide) closely followed by federal coercion. Although the relationship was not statistically significant the inclusion in the analysis of the most efficacious desegregation technique (pairing/clustering with rezoning) did make a difference. Based on the regression coefficient, the equation predicts that the use of pairing and clustering with rezoning should reduce the level of segregation about nine points, when all other variables are taken into account.

The multivariate analysis for secondary schools closely paralleled that for the systemwide level. The main difference appeared with the lack of importance of hiring a new superintendent at the secondary level. Federal coercion was the most powerful influence for this analysis followed by size of district. When the technique of rezoning (the most widely used and tentatively most effective) was included, it did not contribute much to explaining desegregation success

at the secondary level. The equation indicated that rezoning (as opposed to other techniques) should produce an average decline in segregation of about three points.

In short, certain desegregation process and strategy variables did prove to be useful predictors of desegregation success. Although variations appeared by school level, school board and superintendent support and to a lesser extent hiring of a new school superintendent helped further desegregation progress. Especially for elementary schools, the use of pairing and clustering with rezoning as the principal technique also contributed to reducing racial imbalance among the 52 districts.

NOTES

1. In completing the case survey instruments, the analyst-readers were unable to respond to some questions. When the instruments were coded and transformed into machine-readable form, nonresponses were given missing data codes. Missing data, of course, may be a problem in any data analysis.

In choosing the variables from the case survey instrument that would be used to create the desegregation process variables (see Table 2), considerable attention was given to the issue of missing data. Following the lead of Yin, Heald, and Vogel (1977), missing data, in those cases where it was theoretically possible to do so, were assigned to a "neutral" category or position. The alternative would be to listwise delete cases that had missing values for one or more of the variables. This proved to be an unacceptable alternative since it would have automatically reduced the number of cases for analysis from 52 to 19.

For the desegregation process variables employed in the present study, Table 12 shows:

- (1) those variables that contained missing data codes;
- (2) the number of cases for which data were missing;
- (3) the category assigned to those cases with missing data;

TABLE 12

DESEGREGATION PROCESS VARIABLES: MISSING DATA SUMMARY AND ANALYSIS

Item	No. of Cases With Missing Data	Category Missing Data Assigned To	Missing Data Assigned to Neutral Category	Cases With Missing Data Excluded
Court order parameters of plan (Q. 16)	2	NO	.26	.21
Court specify racial balance (Q. 17)	2	NO	.17	.12
Court require outside profes- sional (Q. 62)	2	NO	.30	.35
Citizen participation required (Q. 57)	3	NO	-.14	-.16
Power of citizen group in plan formulation (Q. 59)	4	NONE	-.09	-.10
Power of citizen group in plan implementation (Q. 60)	3	NONE	.01	-.07
School board support (Q. 56)	12	NEUTRAL	.38	.35
Effectiveness of antidesegrega- tion groups (Q. 68)	11	NOT EFFECTIVE	.15	.11
Violence with desegregation (Q. 70)	13	NO VIOLENCE	.27	.28
Nonviolent resistance (Q. 71)	13	NO NONVIOLENT RESISTANCE	.10	.06

- (4) the Pearson product-moment correlation coefficient (r) of the variable with systemwide desegregation success when missing data were assigned to a "neutral" category and when cases containing missing data were excluded.

As Table 12 shows, in every case but one (Q. 60) the difference between the two correlation coefficients is not greater than .05. Moreover, these differences do not display a consistent pattern or direction. Based on these differences, a systematic bias does not seem to appear when missing data are assigned to neutral categories.

2. The adjusted R^2 statistic (\bar{R}^2) adjusts R^2 for the number of independent variables in the equation and the number of cases. According to Nie, et al. (1975: 358) the statistic is "a more conservative estimate of the percent of variance explained, especially when the sample size is small."
3. Residential segregation scores are the dissimilarity indices for the principal city (or Standard Metropolitan Statistical Area, where more appropriate) in the district. The source is Van Valley, Roof, and Wilcox (1977).
4. Busing increase is on a scale of 0 to 20, corresponding generally to percentage increases. The median value for the variable is 4.4.
5. The simple correlation (r) between region and residential segregation is .21, indicating that southern communities indeed tend to be more segregated than those in the North.
6. The other two strategies previously shown to be potentially effective were also included separately in the analysis in lieu of pairing/ clustering with rezoning. They both add an additional 2 percent to

explained variance, but neither shows an unstandardized coefficient (b) of the magnitude of pairing/clustering with rezoning (8.91). The b for pairing and clustering (versus all others) is 7.11; for rezoning (against all others) the b is 5.60. This offers additional confirmation that the use of certain techniques rather than others may help achieve desegregation success. It should be remembered, however, that the effects of the three desegregation techniques on desegregation change, when simultaneously assessed with the other predictor variables, are not statistically significant.

7. Since rezoning was the overwhelming choice of secondary schools and seemed to generally work better than other strategies, no additional techniques were tried in the multivariate analysis.

CHAPTER VI

EXPLAINING WHITE ENROLLMENT DECLINE:

A MULTIVARIATE ANALYSIS

Introduction

"The ineffectiveness of protest demonstrations and protest voting in preventing desegregation, once the decision has been made, will compel some individuals to attempt to avoid school desegregation even though the community is still forced to undergo it" (Rossell, 1981: 15). One way in which school desegregation can be avoided is through "white flight"--the withdrawal of white students from the local school system (see Cataldo, Giles, and Gatlin, 1978).

The research by James S. Coleman and associates made big news in 1975 when they announced that white loss in large city school systems was accelerated by school desegregation. The immediate response by some was to question these results, partly because of the method of analysis and the cities used. For example, Rossell (1978b: 153) contends that if the Coleman study had not divided the group of schools into large and small, they would have discovered that school desegregation had no statistically significant effect on white flight. In fact, Rossell's (1975-76) early research found that desegregation did not contribute

to white enrollment loss. Other early studies also took issue with the degree of white flight identified in Coleman's work (see Farley, 1975a; Pettigrew and Green, 1976; Fitzgerald and Morgan, 1977a, 1977c).

More recently, however, a reassessment of the relationship between school desegregation and white flight has begun to appear. For example, Armor (1978) and Rossell (1981) suggest that while the degree of white loss may be dependent upon other influences (e.g., community attitudes, school level, duration of desegregation efforts), one fact seems certain--school desegregation does accelerate white enrollment loss during implementation year. The primary purpose of this chapter is to identify those influences that may affect the school desegregation implementation process and to test the implementation year-white enrollment decline relationship. The chapter is organized into three sections. Section one serves as an introduction to the white flight literature. In section two white enrollment decline is explained based on the 52 school districts included in the present study. The third section provides a summary of findings.

Research Issues Affecting the Analysis of White Flight

Why the difference? Why, even now, do some studies identify a greater degree of white loss resulting from desegregation than do others? As with most complex social research, this question cannot be answered definitively. Yet, some clues do exist. As Armor (1978: 1) points out, the early studies used substantially the same data base--the Office of Civil Rights (OCR) annual ethnic enrollment data. Most of the initial efforts thus were based on enrollment data through 1972

or 1973, prior to court-ordered desegregation in the North. Even so, Coleman's (1975) findings are at odds with several other early studies, especially Farley (1975a) and Rossell (1975-76). A brief examination of the major studies, the approaches taken, and the variables used might help determine why certain discrepant findings exist.

The research of Coleman, et al. (1975) might be considered first since it caused such a reaction. Focusing on year-by-year changes in white enrollment and using multiple regression techniques, they estimate the increase in loss of whites as a function of desegregation, proportion black in the school system, number of students in the system, and the degree of metropolitan desegregation (as a proxy for white suburbs). Separate analyses are performed for northern and southern cities and for large and small districts. Their essential conclusion is that white loss is greatest in large southern central city districts with a sizable percentage black enrollment. This loss is magnified where white suburbs exist around the district. As noted above, Rossell (1978b) believes that the Coleman study would have found very little white flight had it not divided the cities into groups by size. Coleman's work has also been criticized for the choice of cities (Pettigrew and Green, 1976) and because no effort was made to separate the effects of government-imposed desegregation from other types (Rossell, 1975-76).

Rossell's (1975-76) initial work on white flight should be elaborated briefly as well, since it represents a significant variation upon the methods Coleman used. Employing a quasi-experimental design, Rossell divided 86 medium and large-sized northern school districts into

those legally required to desegregate and a "control" group under no such orders. She then compares pre-desegregation white loss with post-desegregation losses for both groups of districts. In effect, she finds that all the districts experienced white loss but that court-ordered districts had less white flight than the other group (pp. 688-689). Armor (1978: 6-7) faults this particular study on several grounds. He objects to the use of percentage white enrollment as the dependent variable instead of change in white enrollment. He thinks omission of other factors identified by Coleman as affecting white loss (e.g., proportion black) may have influenced the findings as well. Finally, he notes that Rossell did not take account of other events that might influence white enrollment decline prior to the year of desegregation (e.g., changing demographic characteristics).

A second analysis of white flight has been done by Rossell (1978a). Again she uses a quasi-experimental, interrupted time series design for a time period from 1964 to 1975 with 113 school districts. This time Rossell finds that school districts undergoing extensive desegregation are likely to have sustained a statistically significant white enrollment loss. Only three control districts suffered a significant loss (p. 14). Nonetheless, she observes that proportion black in the district and not desegregation is by far the most important predictor of white loss. Also Rossell confirms that the greatest white outmigration occurs in the year of implementation and that post-implementation losses tend to decline. This second Rossell study is one of the best done, although Armor (1978: 7-8) still complains that the absence of demographic trends makes it difficult to determine just how

much white loss results from anticipatory effects. In addition, Rossell includes only one desegregation plan effect (percentage white and black reassigned), although an interaction term with white reassignment and proportion black \geq 35 percent is the second best predictor of white enrollment decline.

Another study taking a somewhat different approach was done in 1978 by David Armor. He includes only a group of large city districts undergoing court-ordered mandatory desegregation. Armor is especially concerned with anticipatory white loss, which he controls for by applying demographic projections to 23 northern and southern districts with over 20 percent minority enrollment and available suburbs (those most prone to white flight). The method essentially involves a comparison of actual white loss rates with rates projected on the basis of demographic trends. Armor (1978: iii) concludes that court-ordered desegregation produces "both large and long-term" increases in white loss, resulting in growing "ethnic and racial isolation in many larger school districts." Although the idea of taking account of demographic changes sounds appealing, Rossell (1981: 26-27) considers Armor's efforts flawed. In particular, she objects to the way in which he derives his demographic projections.

At least two recent studies might be considered for the light they shed on the controversies surrounding the proper approach to studying white enrollment loss. Giles (1978) works with a group of southern districts located in metropolitan areas that underwent government (court or HEW) enforced school desegregation (also see Giles, Cataldo, and Gatlin, 1975). Using only percentage black to predict enrollment

change, Giles examines white loss at both the district and the school level. His principal concern is with the nature of this relationship, e.g., whether or not it is linear. His major finding is that with districts above 30 percent black enrollment, increases in percent black produce an exponential increase in white withdrawal. Yet, districts with less than 30 percent black experiences only moderate white loss, which was unrelated to the level of black concentration. Giles acknowledges that this relationship does not take into account other reasons for white outmigration (e.g., general trends toward suburbanization) and is limited to southern districts.

Finally, a recent study by Farley, Richards, and Wurdock (1980) contends that many of the discrepant findings in this area are the result of the use of different explanatory models. They identify three types--pooled models, means models, and deviations models. In a careful comparison of the three, they conclude that the most appropriate way of assessing the effect of school desegregation on white flight is by using the deviations model. This approach permits a comparison of within-district changes in white enrollment to within-district changes in school desegregation rather than a comparison of such changes across districts. Based on this model, Farley, et al. find that an unusually large drop in segregation is associated with a similarly large decline in white enrollment, at least in the short run. Over a longer period, however, desegregation could account for only a small part of the total white enrollment change. Although this approach appears especially effective as a way of concentrating on variations within districts, the deviation model tested by the authors does not possess good predictive power. For

example, using three predictor variables--percent black, change in level of school desegregation, and metropolitan residential segregation--the deviations from school district means model can only explain 14 percent of the percentage change in white school enrollment (p. 131).

Farley, et al. (1980) are correct that at least some of the controversy over desegregation's impact on white enrollment stems from the use of different statistical models. Yet, as Armor (1978) suggests, regardless of the method, agreement has been reached on several issues. Rossell (1978b: 134-135; also see 1981: 46-48) provides the best summary, based on both aggregate research and case studies, of what is now known regarding this relationship. The following points seem to have considerable support:

- o School desegregation does indeed accelerate white enrollment decline, primarily because of losses during the implementation year.
- o White reassignments to black schools considerably increase white flight.
- o White losses are greater from elementary as opposed to secondary schools.
- o Phased-in desegregation plans may result in greater white flight than single year implementation plans since the more advance notice white parents receive, the greater the white losses.
- o Adverse media publicity may induce greater white losses.
- o Above a certain level proportion black (30-35%) in the school system, white flight substantially increases.

- o The greater the extent of desegregation resistance (e.g., protests, violence) the greater the white flight.
- o White enrollment losses are smaller under metropolitan plans as well as countywide school districts than city only plans.
- o The long-term effects of school desegregation vary by size and type of district and proportion minority. In large central city districts with above 35 percent minority, white enrollment continues to decline as a result of school desegregation.

Some of these propositions appear better established than others. Armor (1978) insists that court-ordered desegregation leads to greater white withdrawal than board-initiated plans. Rossell (1981: 36) disagrees. In addition, Farley, et al. (1980: 137) also suggest that if national trends in white enrollment change are considered, the effects of proportion minority within a district become less clear. Overall, the relationship is as expected--higher percentage black induces greater white loss (but is not statistically significant). In addition, the Farley study finds that in countywide and smaller districts, the relationship reverses--the effect of the district's racial composition is not in the expected direction. Thus, despite the growing number of studies and the increased analytic sophistication, further research may yield useful results. This would seem especially true where, as is the case here, certain variables concerning the desegregation process itself are available.

The case survey approach used in this research permits the accumulation of considerably more information than is customarily available regarding the various features of the desegregation process itself. Consequently, in the analysis that follows primary emphasis will be placed on explaining white enrollment losses resulting from the three types of influences--external, school district, desegregation process--displayed in Figure 4. Similar to most of the comparative studies focusing on white enrollment declines, the dependent variable is a standardized white enrollment measure (proportional white enrollment change) and the between-district model is employed.

Explaining White Enrollment Decline

Before examining the combined effects of a group of variables on white enrollment change, three preliminary analyses might be offered. First, previous research suggests that elementary schools suffer more white losses as a result of school desegregation than do secondary schools (Rossell, 1981: 37). The first table in this analysis will present changes in white enrollment over time by school level. A second question that will be addressed using a bivariate analysis concerns the effects of phased-in plans. As suggested above, where implementation occurs over several years, the white outmigration may accelerate because of the longer notice parents receive. As a test of this proposition, the 52 districts are divided into two groups--those that phased-in versus those that desegregated in one year. Finally, previous literature suggests that large central city districts with high minority enrollments may suffer unusually heavy white flight (see Rossell, 1981: 35).

And, moreover, such districts may not recover their pre-desegregation white enrollment levels over the succeeding years. In addition, Rossell (1981: 35) notes that white enrollment losses should be less in metropolitan districts than among city-only areas. These previous findings, applied to the 52 districts analyzed here, are tested below.

White Enrollment Change by School Level

Table 13 presents the mean white enrollment changes by school level over time. At the systemwide level, prior to desegregation implementation (T-2 and T-1) the school districts lost an average of, respectively, 2.2 and 2.0 percent of their white students. During implementation year the mean white student loss jumped to 9.8 percent, and then returned to approximately pre-implementation levels (2.7%). Clearly, with no other influences considered, desegregation is associated with about a 7 to 8 percent one-time decline in white enrollment.

When districts are divided by school level, some variations appear. As Table 13 reveals, during implementation year elementary schools lost, on the average, 12.1 percent of their white students. In contrast, secondary schools experienced only a 4.7 percent white student enrollment decline. Moreover, pre-implementation losses as well as post-implementation losses are greater at the elementary than the secondary level. In fact, the data lend some support to the notion that when desegregation efforts are aimed at the elementary school level, greater white flight may occur due to anticipatory effects and the "nonentrance" of young children into the school system (see McConahay and Hawley, 1978; Pride, 1980). For example, two years prior to desegregation implementation,

TABLE 13

MEAN PERCENTAGE CHANGES IN WHITE SCHOOL ENROLLMENT BY SCHOOL LEVEL

School Level	Time Point ^a					
	(T-2)	(T-1)	(T)	(T+1)	(T+2)	(T+3)
Systemwide	-2.2 (N=32)	-2.0 (N=43)	-9.8 (N=50)	-2.7 (N=37)	-2.7 (N=39)	-2.7 (N=34)
Elementary	-3.1 (N=34)	-4.9 (N=43)	-12.1 (N=47)	-5.1 (N=39)	-3.5 (N=39)	-4.0 (N=33)
Secondary	-1.1 (N=28)	-0.3 (N=39)	-4.7 (N=46)	-2.1 (N=39)	-1.8 (N=36)	-1.8 (N=33)

^aT equals desegregation implementation year. White enrollment changes are calculated as percentages.
 For example $(T-2) = \frac{(T-2)-(T-3)}{(T-3)}$

elementary schools lost approximately 3 percent of their white students. The year prior to implementation this percentage increased by almost 2 percent to 4.9. In comparison, both at the systemwide and secondary levels T-1 white student declines are less than T-2 losses.

Finally, Table 13 supports the hypothesis that the effect of school desegregation on white student losses is not long-term (Rossell, 1978a; Farley, et al., 1979; McConahay and Hawley, 1978). Regardless of school level, post-implementation white enrollment changes, while slightly larger, are similar in magnitude to pre-implementation declines.

Phased-In Plans

Does it make a difference if a desegregation plan is "phased-in" (spread out over several years)? Rossell (1981: 35) argues that "phasing-in plans . . . may cause greater white flight than simply implementing a plan in its entirety in one year." The argument is that when desegregation plans are phased-in by school level or over several years, parents are given more time to flee. Thus, this advance notice creates greater white flight.

In order to test the generalizability of this finding, the school districts comprising this study were divided into two groups—districts who spread their desegregation efforts over two or more years (phased-in their plans) and those who completed major desegregation efforts within a single year. Table 14 presents the white school enrollment changes for these two groups.

As Table 14 reveals, the 18 districts employing phased-in plans, on the average, lost 2.5 percent more white students in the implementation year than the 32 districts implementing desegregation

TABLE 14

MEAN PERCENTAGE CHANGES IN WHITE SCHOOL ENROLLMENT BY
WHETHER DESEGREGATION PLAN WAS PHASED-IN

Variable Category	White Enroll. Chg. Year Prior to Implementation (T-1) ^b	White Enroll. Chg. Implementation Year (T) ^c	White Enroll. Chg. Year After Implementation (T+1) ^d
Phased-In Plan ^a	-3.3(N=15)	-11.4(N=18)	-1.6(N=8)
Nonphased-in Plan	-1.3(N=28)	-8.9(N=32)	-2.9(N=28)
Grand Mean	-2.0(N=43)	-9.8(N=50)	-2.7(N=37)

^aPrimary desegregation effort occurred over two or more years.

^bPercentage change $(T-1)-(T-2)/(T-2)$.

^cPercentage change $(T)-(T-1)/(T-1)$.

^dPercentage change $(T+1)-(T)/(T)$.

within a single year (-11.4% and -8.9%, respectively). But white enrollment losses were also higher the year prior to implementation in districts using phased-in plans (-3.3 compared to -1.3). This means the net loss difference between the two plans is not great--8.1 percent for phased-in plans (11.4 minus 3.3) and 7.6 percent for one-year plans (8.9 minus 1.3). Taking account of pre-implementation loss yields a difference, then, of only .5 between the two types of plans. Moreover, one-year efforts show greater enrollment declines the year following desegregation than phased-in plans (-2.9% compared to -1.6%). So, if losses before and after the period of implementation are considered, phased-in plans appear in a more favorable light.

White Enrollment Change by Type of School District

Table 15 summarizes the results of the analysis of white enrollment change by type of school district--countywide, large city school district with high minority school enrollment, and all other districts. As Table 15 reveals, for the 20 countywide districts very little white student loss occurred during the year of implementation (-2.9%). In the few years following desegregation a very slight downward white enrollment trend continues. This seems to confirm Rossell's (1981) position regarding metropolitan desegregation. A much different picture appears for big city districts with large minority enrollments. Such districts are defined here as located in a city of 250,000 or greater with a minority enrollment of 30 percent or above. For these 13 school systems, the drop among white students is drastic--21.3 percent. The pre-implementation losses were somewhat greater than average

TABLE 15

MEAN PERCENTAGE CHANGES IN WHITE SCHOOL ENROLLMENT
BY TYPE OF SCHOOL DISTRICT

Type of District	Time Point ^a					
	(T-2)	(T-1)	(T)	(T+1)	(T+2)	(T+3)
Countywide districts (N=20)	1.0 (N=9)	0.5 (N=15)	-2.9 (N=20)	0.5 (N=19)	-0.9 (N=19)	-1.8 (N=17)
Large city school districts with high minority school enrollments (N=13) ^b	-7.3 (N=12)	-3.1 (N=13)	-21.3 (N=13)	-9.3 (N=7)	-10.7 (N=7)	-11.6 (N=4)
All other districts	-3.4 (N=11)	-2.6 (N=15)	-9.2 (N=17)	-3.5 (N=13)	-3.8 (N=13)	-5.4 (N=13)

^aT equals desegregation implementation year. White enrollment changes are calculated as percentages. For example: $(T-2) = \frac{(T-2)-(T-3)}{(T-3)}$.

Since the districts desegregated at different times between 1968-76, in some cases a time point was not available to calculate a white school enrollment change measure. Thus, the N varies across time.

^bLarge equals over 250,000 population; high minority school enrollment equals ≥ 30 percent.

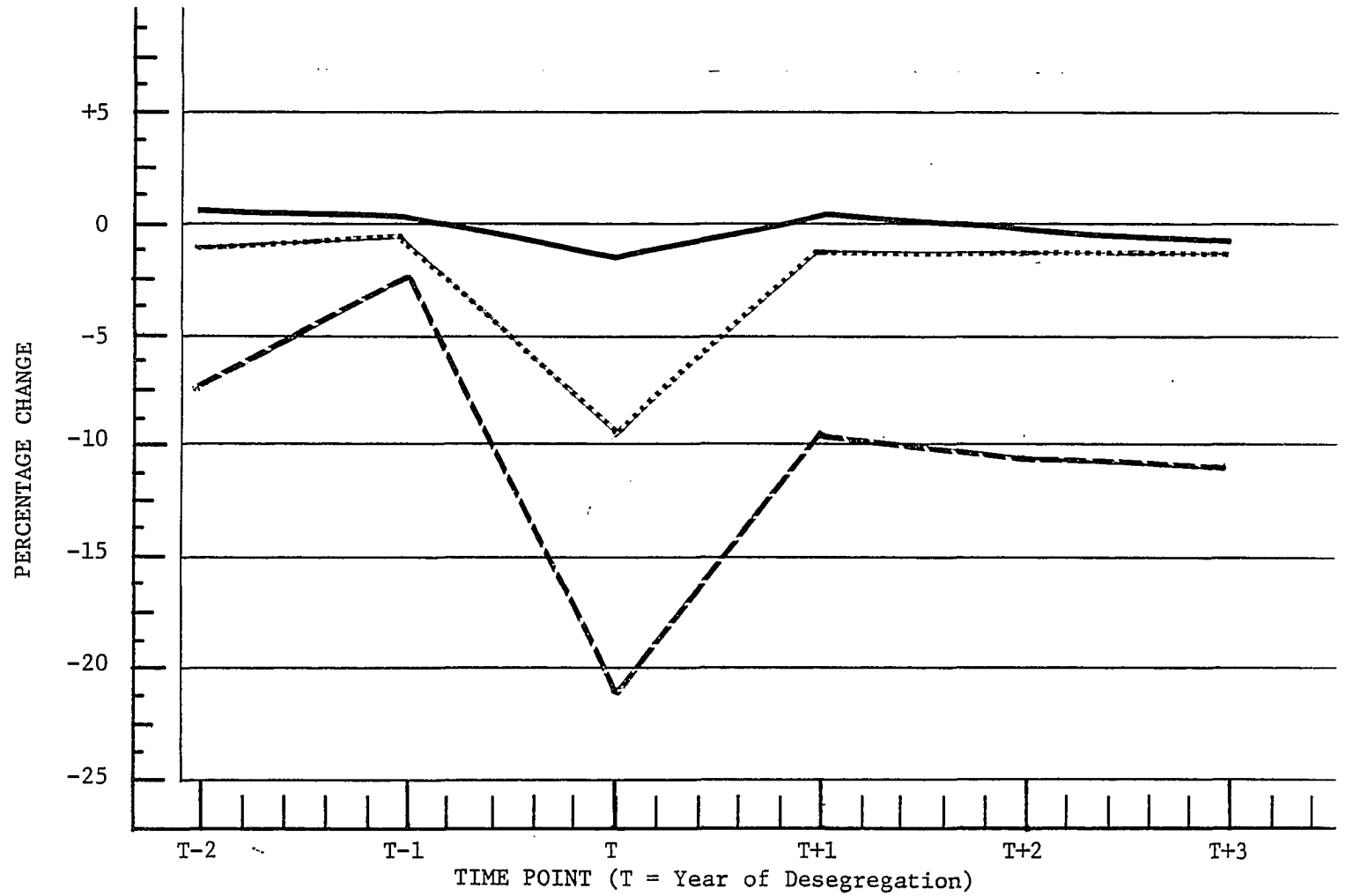
as well; even so, the average net loss at the year of desegregation approximates 16 percent. And, of perhaps greater significance, the post-desegregation decline continues at a fairly high rate--the average for the three years is about 10.5 percent. This compares to an average of about 5 percent loss prior to desegregation.

Finally, Table 15 depicts the white enrollment changes for districts that are neither countywide nor large city with high proportion minority. The white loss for these districts (N=17) parallels the figure for the entire group of 52--9.2 percent. The average loss following desegregation is slightly more than occurred for the two years before implementation.

Since all these figures can be a bit confusing even presented in tabular form, Figure 8 provides a graph of these trends. It shows the average white enrollment declines over a six-year period for the entire group of 52 districts plus the two subcategories discussed above--countywide districts (N=20), large city with high proportion minority (N=13). Perhaps two important facts stand out from this entire analysis--countywide districts have less white loss and large city high minority districts have considerably greater losses compared to all others.

At this point the data analyzed here offer additional support for previous research findings. Desegregation does seem to accelerate white student enrollment losses during implementation year, and elementary schools do seem to suffer greater white student losses than secondary schools. The effects of phased-in plans on white enrollment declines are less certain. White enrollment decline is less than average for countywide districts and by implication for metropolitanwide desegregation

FIGURE 8. CHANGES IN WHITE ENROLLMENT OVER TIME FOR 52 LARGE SCHOOL DISTRICTS



— countywide (N=20)
 - - - large city districts with high minority enrollment (N=13)
 all districts (N=17)

plans. White flight is likely not only to be much greater than average at the desegregation year for large city districts with high minority enrollments, but also such loss continues at a level somewhat beyond that for the year prior to desegregation. But prior research also suggests that a host of other external, school district, and desegregation process influences may affect the degree to which school districts may suffer a loss of white students. Utilizing Figure 4 as a conceptual framework, white enrollment changes are now investigated in a multivariate context. That is, employing three types of explanatory variables--external influences, district characteristics, and desegregation process variables--losses in white school enrollment at the system-wide level from the year prior to desegregation (T-1) to implementation year (T)¹ are examined using multiple regression.

The Multivariate Analysis

The multiple regression equation, which is only for the systemwide level, contains three measures not previously included in the analysis of desegregation success--"suburban escape," average pre-desegregation white enrollment loss, and the absolute change in desegregation level (T-1 to T). Each of these requires some comment and justification. The suburban escape variable is the least obvious on its face. This measure is operationalized as a ratio, with the total school enrollment in the surrounding area (ordinarily the balance of the SMSA enrollment) divided by total enrollment for the district. Thus, if the outlying area school district enrollment exceeds that of the district in question (usually a central city), the ratio would exceed

1.0. If the surrounding area has a lower total enrollment, the figure used for the district in the study would be less than 1.0. Most countywide districts are assigned a score of 0 on the assumption that little or no escape is possible from such districts without perhaps moving a long distance.² The expectation is that where this ratio is high, indicating escape potential, white enrollment loss will also be high.

The second "new" variable is the average pre-desegregation white enrollment change.³ This is incorporated in the equation as a way of controlling for the general tendency of most of these districts to have lost whites prior to plan implementation. In a way, this takes account of the host of additional social and economic influences contributing to white loss. Such factors as central city crime rate, unemployment rate, or even suburban attraction variables (such as housing availability) have not been directly included in this analysis, for several reasons. First, as just suggested, the use of a pre-desegregation white loss variable represents a reasonable proxy for these influences. Second, the addition of several more explanatory measures causes an undesired loss of degrees of freedom in the equation.⁴ Third, these measures are not necessarily good predictors of white flight.⁵ Finally, to the extent white loss at time T is merely a continuation of pre-desegregation trends, the measure used here should help capture that development. This variable should be positively related to white enrollment loss at the year of desegregation.

The third additional variable to the white flight equation is a measure of absolute change in desegregation. Without such a variable,

of course, no test of desegregation's potential effect on white flight would be possible. The most recent research, reviewed above, suggests that desegregation will indeed contribute independently to white enrollment loss.

Before assessing the simultaneous effects of the three types of influences on white enrollment declines, the simple correlations (r) might be examined (see Table 16). With respect to the four external influence variables, suburban escape and average pre-desegregation white enrollment losses display the highest Pearson product-moment correlations (r) with white enrollment losses, .32 and .52, respectively and both are in the expected direction. That is, the greater the availability of alternative schools in the metropolitan area, and the greater the pre-implementation white student losses, the greater the loss of white students during desegregation implementation. As expected, southern region is negatively associated with enrollment declines ($r = -.09$), and federal coercion is positively associated with losses (.04). But both correlations are rather weak.

Of the three school district characteristics, in the bivariate case, percentage minority is quite prominently related to white enrollment declines ($r=.64$). Countywide school districts are negatively associated with losses ($r = -.41$), and as prior research suggests, larger school districts suffer more white student losses ($r = .25$).

An examination of the simple relationships between the six desegregation process variables and white flight shows that citizen participation ($r = .12$), desegregation resistance ($r = .37$), and hiring a new school superintendent ($r = .15$) are positively associated with

TABLE 16

FACTORS INFLUENCING WHITE ENROLLMENT LOSSES DURING
DESEGREGATION IMPLEMENTATION YEAR (N=43)^a

Blocks of Variables	r	Beta	t-score
<u>External Influences</u>			
Region ^b (0/1)	-.09	-.29 (-.068) ^h	1.91*
Federal coercion ^c	.04	-.06 (-.004)	.46
Suburban escape	.32	.12 (.009)	.83
Avg. pre-deseg. white enroll. loss ^e	.52	.13 (.003)	1.03
<u>District Characteristics</u>			
Type of district ^f (0/1)	-.41	-.18 (-.045)	1.22
Percent minority	.64	.57 (.004)	3.94**
Size of district ^g	.25	.37 (.000001)	2.46**
<u>Desegregation Process Variables^c</u>			
Citizen participation	.12	-.07 (-.009)	.74
Desegregation resistance	.37	.23 (.028)	1.87*
Elite support	-.02	.05 (.006)	.43
Supt. and school board support	-.22	-.03 (-.005)	.30
School board insulation	-.22	-.07 (-.012)	.66
Hiring new superintendent	.15	-.01 (-.003)	.10
<u>Desegregation Activity</u>			
Absolute change in deseg. (T-1 to T)	-.04	.40 (b=.002)	2.58**

* p < .05

** p < .01

 $R^2 = .75$; $\bar{R}^2 = .62$; $F = 5.97^{**}$ with 14 and 28 degrees of freedom.

^aNine districts were not included for analysis since a T-2 time point was not available for the calculation of a pre-desegregation white enrollment loss control measure (see note e). Richmond, CA; Escambia County, FL; Orange County, FL; Polk County, FL; Volusia County, FL; DeKalb County, GA; Peoria, IL; Wichita, KS; Tacoma, WA.

^bNon-South/South.

^cFor operationalization see Table 2, pp. 98-100.

^dRatio between suburban ring total school enrollment and district school enrollment. The larger the ratio the more availability of suburban schools in the area.

^ePercentage white student enrollment change between T-3 and T-1 summed and divided by the appropriate number of time points.

^fNoncountywide/countywide.

^gTotal school enrollment.

^hUnstandardized partial regression coefficient.

enrollment declines. While not intuitively appealing, citizen participation in the desegregation process may contribute to the exodus of white students. That desegregation resistance may prompt white exodus, however, is not unexpected. The positive correlation between the hiring of a new superintendent and white student losses also is not surprising. In some districts, school officials bring in a new superintendent to expedite local desegregation efforts, and Rodgers and Bullock (1976a) suggest such a move may result in significant school desegregation. In short, public debates (citizen participation), violent or non-violent protests and demonstrations (desegregation resistance), and strong leadership in the form of a new school superintendent may arouse public awareness of impending desegregation efforts and contribute to white withdrawal from local schools.

In contrast, the relationship of the other three desegregation process variables--elite support ($r = -.02$), superintendent and school board support ($r = -.22$), and school board insulation ($r = -.22$) are negatively related to the loss of white students. These relationships are also in the expected direction. Media, white community leaders, and school elite support of local desegregation efforts should help minimize suspicions and fears about the desegregation process and thereby reduce white flight.

Finally, in the simple case, desegregation change is found to be unrelated to white student losses. In fact, as Table 16 shows the simple correlation between the absolute change in the level of segregation during implementation year and white enrollment loss during implementation year is negative ($r = -.04$), indicating that the greater

the change in desegregation, the less the loss of white students. As will be shown below, however, desegregation activity behaves quite differently in the multivariate analysis.

Although simple relationships may provide some useful initial insights, the simultaneous effects of the variables on white enrollment change are of primary concern here. The beta weights shown in Table 16 indicate the relative importance of each variable while controlling (statistically) for all other variables in the regression equation.⁶

As Table 16 reveals, in the multivariate case, five variables have a statistically significant impact on white enrollment loss. In order of their importance the five variables are: (1) percent minority ($b = .57$)--the larger the percent minority in the school district the greater the white enrollment decline; (2) desegregation change ($b = .40$)--the larger the absolute change in the level of segregation during implementation year the greater the white enrollment loss; (3) size of school district ($b = .37$)--the larger the total school enrollment the greater the white enrollment decline; (4) region ($b = .29$)--enrollment losses are smaller in southern than in nonsouthern districts; and (5) desegregation resistance ($b = .23$)--the greater the desegregation resistance the larger the loss of white students.

In addition, while not statistically significant, three other effects are noteworthy. The suburban escape indicator (availability of other schools in the metropolitan area) and average pre-desegregation white enrollment losses (control measure for pre-implementation white student loss trend) are positively related to white enrollment decline, $b = .12$ and $.13$, respectively. And countywide districts are negatively

associated with losses ($b = -.18$). In total, the 14 variables can explain 75 percent of the variation ($\bar{R}^2 = .62$) in white enrollment decline at the systemwide level.⁷

Although the findings from the multivariate analysis are not particularly surprising and are generally supported by previous research efforts, one question remains. Why is desegregation success unrelated to white enrollment losses in the bivariate case, but significantly related to white enrollment declines when other effects are held constant? Rossell (1981: 32) suggests a possible explanation:

Virtually all . . . aggregate studies have detected a significant interaction effect between percentage black and the extent of desegregation in terms of their effect on white flight. That is, a school district or school with a large proportion of students who are black will have more white flight with a given desegregation plan than will a school district with a small proportion of students who are black.

A statistically significant interaction effect between percent minority and desegregation change in the present study was not found.⁸ Nevertheless, the findings here suggest that when desegregation occurs in certain types of districts, white loss during the implementation year may be substantial. In particular, among large, nonsouthern districts with high proportion minority, which have experienced considerable community resistance, desegregation is especially likely to contribute to white withdrawal.

But what about post-implementation losses: Does implementation year desegregation efforts produce long-term white student losses? The earlier preliminary analysis of mean white enrollment declines over time suggested not. In fact the analysis showed that after desegregation,

post-implementation white student losses are only slightly larger than pre-implementation losses (see Table 13). To assess the post-implementation impact of desegregation actions on white withdrawal, post-implementation white student losses were averaged and regressed on the eight best predictors of implementation year losses--region, type of district, percent minority, size of district, desegregation resistance, suburban escape, average pre-implementation losses, and implementation year desegregation change. Table 17 summarizes the results of this exercise.

As Table 17 shows, the best predictor of post-implementation white enrollment losses is the percentage of minority pupils in the school system ($b = .29$). In addition, the availability of suburban schools as well as pre-implementation white student losses are also good predictors ($b = .25$ for both variables). Countywide districts continue to lose fewer white students than do countywide districts ($b = -.27$). And surprisingly, desegregation resistance becomes negatively related ($b = -.19$) to post-implementation enrollment declines. None of the relationships, however, are statistically significant, although explained variance (R^2) is .55 ($\bar{R}^2 = .37$).

Finally, Table 17 reveals implementation year desegregation efforts are totally unrelated to post-implementation white enrollment losses ($b = .00$). Thus, one might argue that while desegregation efforts may accelerate white student withdrawal during implementation year, post-implementation losses are a function of other forces, especially the percentage minority in the school, the availability of alternative schools in the metropolitan area, pre-desegregation enrollment losses, and whether the district is countywide in area.

TABLE 17

FACTORS INFLUENCING POST-DESEGREGATION WHITE ENROLLMENT LOSSES (N=30)^a

Variables	r	Beta	t-score
Region (0/1)	-.08	.01 (.154) ^g	.10
Suburban escape ^c	.45	.25 (.755)	1.20
Avg. pre-implementation white enrollment loss ^c	.49	.25 (.196)	1.41
Type of district (0/1) ^d	-.52	-.27 (-2.65)	1.26
Percent minority	.52	.29 (.088)	1.56
Size of district ^e	.01	.07 (.00001)	.33
Desegregation resistance ^f	-.09	-.19 (-1.06)	1.20
Absolute change in deseg. (T-1 to T)	-.34	-.01 (-.002)	.05

*p < .05

 $R^2 = .55$; $\bar{R}^2 = .37$; $F = 3.15^*$ with 8 and 21 degrees of freedom.

^aThe N size was reduced to 30 since percent white school enrollment change could not be calculated because T-2 or T+1 was missing for certain districts.

^bNon-South/South.

^cSee Table 16, notes d and e.

^dNoncountywide/countywide.

^eTotal school enrollment.

^fSee Table 2, pp. 98-100.

^gUnstandardized regression coefficient.

Summary

The primary purpose of this chapter was to assess the independent effects of three types of influences--external, school district, desegregation process--on white enrollment losses during the year of school desegregation. Before examining these multivariate relationships, white enrollment losses over time, the impact of phasing-in desegregation efforts, and white losses by type of school district, were investigated. In brief, the results of these preliminary analyses confirmed previous research findings that: (1) desegregation efforts accelerate white enrollment declines during implementation year; (2) elementary schools experience greater white student losses than secondary schools; (3) phasing-in a desegregation plan may result in greater white student withdrawal than implementing a plan in a single year; and (4) large school districts with high minority enrollment experience greater white loss both during and after implementation than do countywide or other types of school districts.

When implementation year white student enrollment declines at the systemwide level were explained in a multivariate context, the following findings emerged.

- o Percent minority in the school system was the single most powerful predictor of white student losses.
- o Desegregation success (absolute change in level of segregation) resulted in greater white enrollment decline.
- o Larger districts (based on enrollment) experienced greater white student withdrawal than smaller districts.

- o Enrollment declines were smaller in southern, county-wide districts than in nonsouthern, noncountywide districts.
- o Districts that experienced greater desegregation resistance lost more white students.
- o The availability of other schools in the metropolitan area as well as pre-implementation white enrollment losses were positively related to implementation year enrollment declines.

When the eight best predictors of implementation year white enrollment declines were included in a multiple regression equation to explain post-implementation white student losses, once again percent minority in the school system was the most powerful predictor. In addition, the availability of alternative schools in the metropolitan area and a pre-implementation loss trend were also good predictors of post-implementation white withdrawal. But, unlike during implementation year, desegregation activity was found to be unrelated to post-implementation white losses.

In conclusion, the results of the analyses reported here are not particularly novel or surprising and tend to confirm findings reported in other research. It should be noted, however, that many of the proposed relationships reported in previous research are based on case studies. In contrast, in the present study various aspects of the desegregation efforts of 52 school districts were systematically assessed using the case survey method. Thus, this study not only supports previous findings but also enhances the generalizability of these findings.

NOTES

1. Some districts gained white students during desegregation implementation (primarily countywide southern districts). Since we wished to explain white enrollment decline, the variable scores were reversed (multiplied by minus 1).
2. Enrollment for most countywide districts was identical or virtually so with the SMSA enrollment. In a few instances estimates were made. For example, it did not seem appropriate to use the total non-central city SMSA school enrollment for the Washington, D.C., metropolitan area to create the measure for Prince George's County. Instead, the enrollment figure for an adjacent district (Montgomery County) was used. Likewise, the total figure for the metropolitan area outside of Los Angeles did not seem valid for use in creating the suburban escape variable for rather small Pasadena. Instead the enrollment figure for a nearby similar district (Glendale) was used to represent the possible escape area. Data are for 1971 and come from U.S. Bureau of the Census (1972: Table 19).
3. Percentage change in white school enrollment between T-3 and T-2 and T-2 and T-1 were summed and divided by two if both percentages could be calculated; otherwise, T-2 to T-1 change was used. The variable was reversed to reflect enrollment declines.

4. The equation in Table 16 contains 14 predictor variables, which seems to be the upper limit for an N of 52 without seriously exhausting the essential degrees of freedom for least squares regression. Any increases in explained variance would likely be the result of the mere addition of new independent variables and would not be substantively meaningful.
5. This is especially true of various efforts to measure the negative features of central city life. Rossell (1978a: 17) finds that neither crime rate nor employment rate are statistically significant predictors of white enrollment change. On the other hand, researchers using certain proxies for "suburban appeal" such as total new suburban dwellings have found such measures importantly related to white movement to the suburbs (see Marshall, 1979).
6. Similar regression analyses were also performed across school levels. In general, the impact of the variables on white enrollment losses are the same at both the elementary and secondary school level. A few minor differences did emerge, however. At the secondary level the suburban escape indicator was not important ($b = -.03$). In contrast, at the elementary level it was the fourth best predictor ($b = .21$), following percent minority ($b = .44$), district size ($b = .34$), and desegregation change ($b = .50$). At the secondary level the variables were able to account for 76 percent of the variation ($\bar{R}^2 = .62$) in white enrollment decline. At the elementary level, the R^2 was .50 ($\bar{R}^2 = .24$).
7. While there are conflicting findings, some studies have found that greater busing distances produce greater white flight (see Rossell,

1980; for opposite findings see Giles, Gatlin, and Cataldo, 1974). Unfortunately, we were not able to collect such data in the present study. However, when we added an indicator of increases in busing due to local desegregation efforts to the regression equation, the explained variance increased by 1 percent (to 76%). The beta for the variable was a $-.18$, indicating that increases in busing are negatively associated with enrollment declines. Since the inclusion of the variable would have further reduced the N size to 37 and since the effect of the variable was not statistically significant, it was not used in the final equation.

8. In order to test for an interaction effect between percentage minority and desegregation change, hierarchical regression was employed (see Cohen and Cohen, 1975: Chap. 8). First, desegregation change and percent minority were used to predict implementation year white enrollment losses. Then a multiplicative desegregation change and percent minority interaction term was added to the equation. The results of the analysis showed that while the interaction term could explain 2 percent more of the variance in white enrollment declines than the two variables singularly, the F-value of the addition to R^2 was not statistically significant ($F = 1.44$, require an F-value of 4.09 to be significant at .05 level).

In addition to a potential interaction effect between desegregation change and percent black, previous literature also suggests that the relationship between percent black and white student withdrawal may be nonlinear (see Giles, 1978). The argument is that after a district's percent minority enrollment reaches a certain

threshold or "tipping point" (around 30%), white enrollment losses increase exponentially. To check for such a nonlinear relationship here, three tests were employed. First, a scatterplot between percent minority and white enrollment decline was visually examined. This examination clearly reveals a linear relationship ($r = .65$). Second, employing the same multiple regression procedure used by Giles (1978) to test for nonlinearity, white enrollment decline was regressed on two variables--percentage minority and percentage minority squared. Percentage minority squared is a quadratic term representing the possible exponential effect of percentage minority on enrollment loss. The quadratic term in this equation was not statistically significant, indicating that the relationship between proportion minority and white flight is linear.

Finally, as a third test hierarchical regression was employed. First, white loss was regressed on percentage minority and then the quadratic term (percentage minority squared) was added to the equation. The additional quadratic term added virtually nothing to explained variance (R^2 increased from .417 to .418), again revealing that the relationship is linear. In short, no support for a threshold effect was found.

CHAPTER VII

THE STUDY IN RETROSPECT

Purpose

Previous studies focusing on school desegregation have been of two general types--case studies describing the process and influences that affect location-specific desegregation efforts and comparative, aggregate studies that seek to isolate the determinants of desegregation success and/or white enrollment decline. According to Crain and Hawley (1981: 5), however, the current desegregation research agenda requires that research should attempt to capture the complexity of the desegregation process as well as the factors (determinants) that affect different types of desegregation outcomes. In short, an effort should be made to bridge the gap between two separate approaches to studying school desegregation, case studies and comparative studies.

To date, Rodgers and Bullock's (1976a) analysis of desegregation efforts in 31 Georgia school districts is perhaps the best example of an attempt to bridge this gap. Employing a comparative research design, these authors systematically examined the effects of process variables (white organized resistance and black activism) on desegregation success. Previously, these effects had only been speculatively defined in case studies.

Based on the work initiated by Rodgers and Bullock (1976a), the purpose of this study was to investigate three sets of school desegregation related questions:

- o Which desegregation strategies are most commonly employed across school districts? What is the relationship between the type of desegregation strategy employed by a district and the district's success in reducing racial isolation?
- o What are the "determinants" of school desegregation success? Do certain external influences, school district characteristics, desegregation process variables, and desegregation strategies facilitate or impede the school desegregation process?
- o What factors explain white enrollment declines? Is desegregation success a good predictor of the white exodus of students from the school system?

To facilitate this investigation, school desegregation was conceptualized as a process and an implementation model comprised of three blocks of potential influences--external forces, school district characteristics, and desegregation process variables--was advanced. Much of the data used in the study were gathered using a relatively new approach, the case survey method, that involves the use of an instrument to record various features of the desegregation process that appear in the case literature so they can be quantified, aggregated, and systematically investigated. Employing the data gleaned from the case survey method and data derived primarily from the Office of Civil Rights

school district file, three analyses were undertaken. First, a preliminary effort to gauge the efficacy of certain strategies or techniques in reducing racial isolation and in minimizing white enrollment loss was presented (Chapter 4). Second, school desegregation success systemwide as well as by school level (elementary and secondary) was analyzed in a multivariate context (Chapter 5). Finally, an attempt to explain implementation year and post-implementation year white enrollment losses was undertaken (Chapter 6). Before discussing the implications associated with the results of these analyses, a brief summary of the purpose and findings emerging from each chapter is presented.

Findings

In the first chapter the historical and legal lineage of public school desegregation efforts in the United States was traced. The primary purpose of this chapter was to document the important role that the federal judiciary has played in either impeding or facilitating the school desegregation process. Prior to 1954, the official posture of the courts was reflected in the Supreme Court decision in Plessy v. Ferguson (1896: 551-552): "If one race be inferior to the other socially, the Constitution of the United States cannot put them upon the same plane." The Court surmised that "separate-but-equal" public facilities was an adequate response to the Constitution's demand for equal protection of the laws. The individual states and not the federal government would determine local school policy.

In 1954, the Supreme Court officially abdicated the separate but equal doctrine. In Brown v. Board of Education of Topeka (1954)

the Court ruled that segregation of children in public schools solely on the basis of race, even though physical facilities may be equal, deprived children of minority groups of equal educational opportunities. This ruling established school desegregation as a national public policy. One year later in Brown II (1955) the Court provided broad guidelines for desegregating public schools and ordered that desegregation should proceed with "all deliberate speed."

One key component was needed to fulfill the Brown mandate--compliance. A review of efforts to implement school desegregation policy highlighted the overt resistance of southern communities to school desegregation, the search for desegregation standards, the massive desegregation of southern schools, and efforts to move desegregation from the South to the northern and western regions of the nation.

The chapter concluded with a discussion of four desegregation related issues that continue to arouse considerable controversy and that require further court consideration and clarification--metropolitan (interdistrict) desegregation plans, busing, white flight, and resegregation.

The second chapter was devoted to the development of a conceptual framework for understanding the process of desegregating local schools. A brief overview of the implementation literature suggested that a number of general (multiplicity of participants, multiplicity of perspectives, and multiplicity of decision points) as well as specific desegregation-related problems (problems of mission, power, structure, and resources) may affect desegregation implementation. Moreover, an examination of four approaches to implement school desegregation

policy (organizational development, systems management, bureaucratic processes, and conflict and bargaining) as well as the general implementation literature resulted in the identification of three general types of influences that impinge on the desegregation process--external pressure, local environmental conditions, and community actors and attitudes.

A number of previous studies have attempted to describe or explain school desegregation and/or white enrollment decline based on these three types of forces. A critical appraisal of these efforts, however, suggested that while case studies provide rich detail about the process of desegregation, they are limited because observed relationships are not generalizable. On the other hand, comparative studies are limited since, for the most part, they do not test the effects of variables that the case study literature suggests bear directly upon desegregation success--variables referred to here as desegregation process variables (e.g., school board support, elite attitudes, etc.).

In response to these shortcomings, a research design similar to the one employed by Rodgers and Bullock (1976a) was advanced. The proposed implementation model allowed for the systematic analysis of three types of influences--extralocal, school district, and desegregation process--on desegregation success and white enrollment decline. In order to gather and operationalize indicators needed to tap desegregation process variables, the case survey method was introduced as an appropriate methodology. The case survey method permits the extraction of relevant information from a number of cases in a replicable and reliable fashion.

Chapter 3 introduced the research design employed in the study. The primary purpose of the chapter was to familiarize the reader with the case survey method and to present the variables and methods used in subsequent analyses.

An exhaustive search of the case literature, both published and unpublished, yielded 52 usable cases that met three selection criteria:

- (1) the major desegregation action had to occur between 1968 and 1976 (the dependent variables were limited to that time period);
- (2) total school enrollment had to exceed 20,000 students (to qualify as a "large" district);
- (3) the percentage minority in the school system had to equal or exceed 10 percent.

In addition, the results of an exercise to determine the reliability of analyst-readers' responses to various items asked on the case survey instrument were reported. The exercise produced interanalyst agreement scores quite similar in magnitude to those reported in two recent uses of the technique (see Table 1). Finally, the variables, their source, and operationalization were summarized in Table 2.

Chapters 4, 5, and 6 summarized the results of three data analyses. In the fourth chapter the relationship between commonly employed desegregation strategies and desegregation success and white student outmigration were investigated.

Although this analysis consisted primarily of a set of bivariate tables, several noteworthy results emerged. First, unlike

previous research testing the effects of desegregation strategies in an aggregate context, this analysis did find that certain specific techniques might make a modest contribution to improving racial balance. Those elementary schools using rezoning in combination with pairing and clustering as their principal technique not only achieved more reduction in levels of segregation (based on the index of dissimilarity) than those using other techniques, such schools also had less white enrollment loss. A similar finding appeared for secondary schools. Here the technique that contributed most to desegregation success was rezoning. White flight was lower for this technique in comparison with others as well.

Busing was also included in the bivariate analysis. When districts were divided at the median on a measure of busing increase, those above the average attained somewhat greater racial balance than the other group. But those with more busing also experienced somewhat greater white enrollment losses. Since the busing data were not as reliable as most of the other information and the analysis was only bivariate, these findings should be considered as tentative and inconclusive.

Based on an implementation model in which explanatory influences were grouped into three categories--external forces, school district characteristics, desegregation process variables--a multivariate analysis of desegregation success was offered in Chapter 5. External forces were represented by region (North/South) and a measure of federal coercion. School district characteristics included type of district (countywide/noncountywide), percentage minority, and size (total

enrollment). Five desegregation process variables were incorporated in the multiple regression equation--superintendent and board support, citizen participation, elite support, hiring of a new superintendent, and school board insulation. Finally, the most effective desegregation technique was included as a dummy variable (used/not used). The analysis was performed for the entire school system as well as by school level (elementary or secondary). The desegregation technique measure was used only in the equation for each level, since the most successful strategy varied by level. This analysis differed from previous efforts to assess desegregation change at the aggregate level in one primary respect. It incorporated desegregation process measures and the desegregation technique variable. The use of the case survey method allowed the inclusion of these potentially important effects, which otherwise would be difficult to obtain.

At the systemwide level the following variables had the greatest effect on desegregation success (when all other factors were statistically controlled):

- o Federal coercion was the single most powerful force in reducing racial isolation.
- o Larger districts achieved less racial balance than smaller districts.
- o Southern districts had greater desegregation success than those outside the South.
- o Countywide districts improved racial balance more than did noncountywide districts.

- o Support by school officials helped achieve desegregation progress.
- o Hiring a new school superintendent tended to improve the prospects for desegregation success.

Certain differences were apparent when separate multivariate analyses were conducted by school level. For elementary schools county-wide district was the best variable predicting desegregation success, closely followed by federal pressure. Although not statistically significant the inclusion of the most effective desegregation technique (pairing/clustering with rezoning) did make some difference in the expected direction. Elementary schools using this technique could expect somewhat greater success than those choosing another course of action.

The multivariate analysis for secondary schools produced results similar to the systemwide analysis. The principal discrepancy was the failure of the variable "hiring a new superintendent" to contribute much to reducing racial isolation. Federal coercion was the best predictor at this level followed by size of district. The use of rezoning as the principal technique did not add significantly to explaining desegregation success.

In Chapter 6 a multivariate analysis of white enrollment change was performed. The same basic research model was employed with the addition of three new variables. Two more measures of external conditions were added--a proxy for the potential for families to flee the district (called "suburban escape") and the rate of pre-implementation white enrollment loss. This second measure was included to represent

two trends: (1) the extent to which other social and economic conditions might contribute to white outmigration, and (2) the degree to which white loss at the year of desegregation might be a mere extension or continuation of previously occurring white student declines. The white flight equation contained one more new variable--desegregation success, measured as the absolute change in level of segregation for the year prior to implementation to the year of implementation.

A preliminary examination of changes in white enrollment over several years indicated that desegregation is associated with a one-time abnormal white student loss. Elementary schools suffered more white outmigration than did secondary schools. Although the evidence was not overwhelming, there was some indication that phased-in plans contributed to slightly more white loss than those plans implemented in only one year. Finally, large central city school districts with high minority enrollments tended to lose more white students than did countywide or other types of school districts.

When white student enrollment declines at implementation year were subjected to multivariate analysis, the following statistically significant results were reported (when controlling for all other effects):

- o Percentage minority in the school system was the single strongest effect contributing to white withdrawal.
- o Desegregation success resulted in greater white enrollment decline.

- o Larger districts experienced greater white loss than smaller districts.
- o Those districts with greater desegregation resistance had larger white losses than those with less opposition.
- o Nonsouthern systems suffered more white student out-migration than did southern districts.

Two other findings seem worth mentioning. In a multivariate analysis of post-implementation white student loss, no relationship was discerned between desegregation success and white flight. School desegregation is related to white withdrawal at only one time period--the year of implementation. And, no threshold effect for percentage minority enrollment was discovered. In other words, the relationship between percentage minority and white withdrawal was substantially linear.

Implications

The implications associated with this study have relevance for both policy makers and academics. First, and perhaps most obviously, federal coercion constitutes the single most powerful force in producing desegregation success. This research provides little support to those who might hope that local school districts will somehow achieve effective desegregation with voluntary efforts. Federal pressure remains essential. In all likelihood, the courts will continue to rely on what Yudof labels "systems management" to force some districts to achieve appropriate racial balance. For as Rodgers and Bullock (1976a) remind us, school desegregation can be characterized as a process of coercion to compliance.

Second, what about desegregation strategies? In brief, the particular desegregation technique(s) does make some difference, especially at the elementary level. For elementary schools the evidence suggests the following:

- o Pairing and clustering in combination with rezoning seems likely to yield the greatest success not only in achieving racial balance but in minimizing white flight.
- o The use of a number of techniques does not assure greater desegregation success.
- o Active, overt support of the desegregation effort by school officials should facilitate the reduction in racial isolation.

For the desegregation of secondary schools, the specific technique employed does not matter much. The most popular approach has been rezoning. The bivariate analysis indicates that, in fact, this strategy may prove somewhat more effective than others. But when other potential influences are considered simultaneously, the use of rezoning has little impact for overall desegregation success. Nonetheless, since rezoning is a relatively simple technique to apply and is widely used, these findings suggest that Foster (1973) and Hughes, Gordon, and Hillman (1980) are correct in their statements that rezoning should probably be considered the strategy of first resort for secondary schools.

Several other points might be made. First, school officials should not be discouraged at the appearance of public opposition to desegregation. As Kirby, et al. (1973) suggest, this likely signifies that the plan is indeed apt to achieve considerable success in reducing

racial separatism, although such opposition may accelerate white withdrawal.

Second, certain events and procedures associated with the desegregation process--citizen participation and community elite support--do not contribute much to the level of desegregation success. On the other hand, this research suggests that hiring a new superintendent and school board support are important determinants of desegregation success.

Third, this research lends support to those who are skeptical about magnet schools. For these 52 districts, communities relying primarily on magnets alone or in combination tended to have less desegregation success than those systems employing the more efficacious techniques discussed above.

Fourth, what about busing? Most of these desegregating districts did indeed increase the degree of school-supported student transportation. Some limited evidence suggests, however, that the degree of busing is only tangentially related to the amount of success achieved. Reductions in racial isolation are only marginally related to increases in busing. This implies that considerable desegregation can be achieved without massive increases in busing.

With regard to white flight, this research does not offer much that is new. Yet this in itself may be quite important. This analysis tends to confirm the most recent findings that some degree of one-time white student loss is inevitable at the year of desegregation. Some of this withdrawal will likely occur regardless of what school officials do. Avoiding phased-in plans may help reduce the loss slightly. The more effective desegregation techniques were also shown

to be somewhat less likely to be associated with large white withdrawal. Although desegregation opposition tends to induce more white out-migration, this may be something over which local officials may have little control. Yet as Hawley, et al. (1981: 61-65) point out, it is up to the school district and other local leaders to deal with the anxieties and fears that parents have. These authors suggest that positive media coverage may allay some parental concerns and that every effort should be made to provide parents with clear and full information about the desegregation plan and its implementation. It does seem important, however, to remember that research presented here suggests white enrollment losses as a result of desegregation are not long term.

In retrospect, perhaps one of the most important policy implications growing out of this study concerns findings regarding countywide school districts. Not only were countywide districts found to achieve greater desegregation success, but also they suffered less white student outmigration, especially when compared to large central city school districts with high minority enrollments (see Table 15). It seems worth repeating that the U.S. Commission on Civil Rights (1977: 6, 11, 12) takes the position that:

To a very great extent the remaining problems of segregation by race and national origin in public schools are problems that exist in big cities . . . [w]e have come to a point where substantial integration of public schools can be accomplished only if the area covered is larger than the city itself There is no other approach that will deal promptly and effectively with racially isolated schools in metropolitan areas.

To the extent the courts or state governments can facilitate the creation of metropolitan districts, white flight should be lessened

and more effective desegregation remedies should be possible. Although Milliken v. Bradley remains a formidable obstacle, this research supports the widely held view that "metropolitan plans are highly effective strategies for reducing racial and class isolation" (Hawley, et al., 1981: 39).

Two more academic-based implications are also associated with this study. First, this research suggests that efforts to explain school desegregation success should be investigated not only systemwide, but also by school level (elementary and secondary). Findings here indicate that, for example, desegregation strategies may make a greater difference at the elementary than at the secondary school level. In addition, desegregation success is much harder to explain at the elementary ($R^2 = .36$; $\bar{R}^2 = .16$) than at the secondary level ($R^2 = .55$; $\bar{R}^2 = .41$). Second, the use of the case survey method itself holds considerable potential as a means of aggregating a case study literature and systematically investigating relationships that are only tentatively defined.

Limitations

Before concluding, a brief discussion of three limitations of this research project is in order. The first limitation concerns the issue of generalizability. Which school districts can the findings summarized above be generalized to? Since all of the districts analyzed here initiated formal desegregation actions between the years 1968 and 1976, the findings can only be generalized to those districts that attempt to reduce racial isolation by implementing a specific school desegregation plan.

The rationale for including for analysis only districts that initiated formal desegregation actions was based on two points. First, Crain and Hawley (1981) insist that desegregation is a distinct process, a process where change is planned. And change that results from planned action (i.e., as a result of a desegregation plan) should not be confused with change that results from unplanned action (e.g., desegregation as a result of changing birth or residential patterns). Second, one of the primary purposes of this research was to assess the impact of such variables as superintendent and school board support, elite attitudes, and desegregation techniques on desegregation success. If a district is not in the process of implementing a desegregation plan, whether or not, for example, school officials favor desegregation efforts is not of immediate concern.

Despite these reasons for focusing only on districts that attempt to implement a specific desegregation proposal, one might speculate that such a focus has the effect of attenuating the effect of, for example, federal coercion on desegregation success. That is, if both districts that desegregated and did not desegregate had been included in the analysis, the impact of federal coercion would probably have been enhanced. This is because federal coercion is a strong predictor of success, and the introduction of districts that did not desegregate, and consequently experienced little change in levels of segregation, would tend to accentuate the strong relationship between coercion and success.

The second limitation concerns the use of public policy as a focus of analysis and the use of case studies to gather information.

This study was predicated on the assumption that in order to better understand the implementation of desegregation policy, those factors which desegregation case studies and aggregate analysis suggest affect desegregation success should be included in a comparative research design and systematically assessed. But as Greenberg, et al. (1976: 1533) argue, problems arise when public policy becomes the focus of systematic comparative analysis.

The authors note:

. . . the policy process takes place over time. . . . This leads to difficulty in explaining 'the process' as a simple unit. Even if one attempts to explain specific outcomes, the explanatory forces invoked almost invariably involve characteristics of this long and shifting process (Greenberg, et al., 1976: 1533).

With respect to the use of case material as a reference source the researchers state:

When a characteristic of the participants becomes a variable of interest, as it often does, variation among participants with regard to that characteristic causes difficulty. . . .[p]erceptions vary considerably, of course, depending upon the participants consulted or described. . . .[t]hat is, by the researcher, interviewer, casewriter, or other outside observer. Ambiguity is introduced when the heterogeneous group of all participants, or heterogeneous subcollections of participants, must be assigned a single score on such a characteristic (Greenberg, et al., 1976: 1533).

These points are particularly relevant to research presented here. First, in attempting to explain two relatively specific desegregation outcomes--desegregation success and white enrollment decline--only a "slice," with respect to time, of the desegregation process is captured. The focus was on investigating the effects of three types of influences, external, school district, and local attitudes and techniques,

on desegregation success and white enrollment decline during the implementation year. And as Greenberg and associates suggest, events preceding and following implementation year efforts also can affect the overall policy implementation process. Second, much of the data used in the study came from desegregation case studies by virtue of the case survey method. In order to operationalize variables, "heterogeneous subcollections of participants" (e.g., school officials, community elites, citizen groups) had to be assigned a single score on a characteristic (e.g., support, resistance, participation). The potential for measurement error is not only increased by the use of a summary measure to represent a number of individual's support for, attitudes about, or participation in desegregation efforts, but is also potentially increased since the data are twice removed from the actual desegregation experience; once as reported in the case study and once as interpreted by the case survey analyst-readers.

Finally, the study is limited because no effort was made to model the interrelationships among the variables employed in the study. Rather, the emphasis was on determining the independent impact of each variable on desegregation success and white enrollment decline. The examination of the linkages among the variables remains an area fertile for further desegregation research.

Despite these limitations, the research represents one of the few efforts to include process and technique variables in an aggregate analysis of school desegregation outcomes. The case survey approach permitted the accumulation and aggregation of diverse desegregation experiences among 52 large U.S. districts. Most were compelled

to desegregate under federal mandate. Yet the findings here confirm that federal coercion, while crucial, is only one among many forces shaping the final desegregation outcome. Indeed, a variety of actions can be taken by local and national policy makers to facilitate the creation of equitable and effective desegregation plans. No precise set of guidelines was provided here. But, it is hoped that some of these findings will be useful to those who must continue the search for workable and acceptable solutions to the enduring problem of racially segregated schools.

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APPENDIX A

CASE SURVEY INSTRUMENT

University of Oklahoma

Bureau of Government Research

DESEGREGATION CASE SURVEY INSTRUMENT

District and Community Characteristics

1. City name and school district: _____
2. County-wide district: _____
3. State: _____
4. Region: _____
5. Population (1970): _____
6. Percent black (city, 1970): _____
7. Percent minority (city, 1970): _____
8. Income (1970): _____
9. Ethnicity (1970): _____

t Sure Desegregation Plan Background

(x)

- ___ 10. Source of desegregation plan impetus:
 - ___ 1. Local board
 - ___ 2. HEW
 - ___ 3. Court order
- ___ 11. Plan formulated by:
 - ___ 1. Local school
 - ___ 2. Consultants appointed by school board
 - ___ 3. Consultants appointed by court
 - ___ 4. HEW
- ___ 12. Public hearings held during plan formulation:
 - ___ 1. No
 - ___ 2. Yes
- ___ 13. School year plan first implemented: E ____ J/M ____ H ____
- ___ 14. School year plan completed: E ____ J/M ____ H ____
- ___ 15a. Was plan implemented within time schedule:
 - ___ 1. No
 - ___ 2. Yes
- 15b. Year of first major case or significant impetus for desegregation or the reopening of an earlier case, which resulted in the extant desegregation plan: _____

Court Involvement in Plan

- ___ 16. To what degree did the court order specify the parameters of the plan regarding the techniques to be implemented?
 - ___ 1. None
 - ___ 2. Suggestions/recommendations/guidelines
 - ___ 3. Specific plan or technique ordered
- ___ 17. To what degree did the court specify the racial balance to be attained by desegregation?
 - ___ 1. None
 - ___ 2. Recommended minimum and maximum racial balance
 - ___ 3. Ordered minimum and maximum racial balance

Desegregation Plan Techniques

The following questions pertain only to the Elementary School level (check the number that applies to this city):

- ___ 18. Voluntary open enrollment, freedom of choice:
- ___ 1. None
 - ___ 2. Light
 - ___ 3. Moderate
 - ___ 4. Heavy
 - ___ 5. Total
- ___ 19. Constructing new schools in minority, mixed, or "neutral" neighborhoods:
- ___ 1. None
 - ___ 2. Light
 - ___ 3. Moderate
 - ___ 4. Heavy
 - ___ 5. Total
- ___ 20. Pairing or clustering:
- ___ 1. None
 - ___ 2. Light
 - ___ 3. Moderate
 - ___ 4. Heavy
 - ___ 5. Total
- ___ 21. Magnet-only plan (schools with special programs open to any student who wishes to attend, either on a part-time or full-time basis):
- ___ 1. None
 - ___ 2. Light
 - ___ 3. Moderate
 - ___ 4. Heavy
 - ___ 5. Total
- ___ 22. Magnet-mandatory plan (where magnet schools are one component of a mandatory plan):
- ___ 1. None
 - ___ 2. Light
 - ___ 3. Moderate
 - ___ 4. Heavy
 - ___ 5. Total
- ___ 23. Rezoning or school closing (the placement of school attendance boundaries to include both majority and minority race children in every possible school within the zone. School closing is also included):
- ___ 1. None
 - ___ 2. Light
 - ___ 3. Moderate
 - ___ 4. Heavy
 - ___ 5. Total
- ___ 24. Education Parks (a centrally located single facility which replaces other schools previously in the area):
- ___ 1. None
 - ___ 2. Light
 - ___ 3. Moderate
 - ___ 4. Heavy
 - ___ 5. Total

- *25. Estimate the amount of busing before the plan was implemented (zero being none; 10 indicates very extensive)

white only

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

minorities only

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

total

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

- *26. Estimate the amount of busing taking place after plan implementation (zero being none; 10 indicates very extensive)

white only

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

minorities only

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

total

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

- *27. Estimate the approximate increase in busing as a result of the plan (zero being none; 10 indicates extremely large)

white only

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

Cont.

*Although originally intended for elementary schools only, busing data was recorded here for the entire district (see text for discussion).

27. Cont.

<u>minorities only</u>	
___ % _____	exact no. _____
_____ 0 1 2 3 4 5 6 7 8 9 10	
<u>total</u>	
___ % _____	exact no. _____
_____ 0 1 2 3 4 5 6 7 8 9 10	

The following questions pertain only to the junior high or middle school level (check the number that applies to this city):

- ___ 28. Voluntary open enrollment, freedom of choice:
- ___ 1. None
 - ___ 2. Light
 - ___ 3. Moderate
 - ___ 4. Heavy
 - ___ 5. Total
- ___ 29. Constructing new schools in minority, mixed or "neutral" neighborhoods:
- ___ 1. None
 - ___ 2. Light
 - ___ 3. Moderate
 - ___ 4. Heavy
 - ___ 5. Total
- ___ 30. Pairing or clustering:
- ___ 1. None
 - ___ 2. Light
 - ___ 3. Moderate
 - ___ 4. Heavy
 - ___ 5. Total
- ___ 31. Magnet-only plan (schools with special programs open to any student who wishes to attend, either on a part-time or full-time basis):
- ___ 1. None
 - ___ 2. Light
 - ___ 3. Moderate
 - ___ 4. Heavy
 - ___ 5. Total
- ___ 32. Magnet-mandatory plan (where magnet schools are one component of a mandatory plan):
- ___ 1. None
 - ___ 2. Light
 - ___ 3. Moderate
 - ___ 4. Heavy
 - ___ 5. Total

33. Rezoning or school closing (the placement of school attendance boundaries to include both majority and minority race children in every possible school within the zone. School closing is also included):

- 1. None
- 2. Light
- 3. Moderate
- 4. Heavy
- 5. Total

34. Education Parks (a centrally located single facility which replaces other schools previously in the area):

- 1. None
- 2. Light
- 3. Moderate
- 4. Heavy
- 5. Total

35. Estimate the amount of busing before the plan was implemented (zero being none; 10 indicates very extensive)

(Questions 35, 36, & 37 were omitted)

white only

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

minorities only

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

total

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

36. Estimate the amount of busing taking place after plan implementation (zero being none; 10 indicates very extensive)

white only

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

minorities only

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

total

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

37. Estimate the approximate increase in busing as a result of the plan (zero being none; 10 indicates extremely large)

white only

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

minorities only

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

total

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

The following questions pertain only to the high school level (check the number that applies to this city):

38. Voluntary open enrollment, freedom of choice:

- 1. None
- 2. Light
- 3. Moderate
- 4. Heavy
- 5. Total

39. Constructing new schools in minority, mixed or "neutral" neighborhoods:

- 1. None
- 2. Light
- 3. Moderate
- 4. Heavy
- 5. Total

40. Pairing or clustering:

- 1. None
- 2. Light
- 3. Moderate
- 4. Heavy
- 5. Total

41. Magnet-only plan (schools with special programs open to any student who wishes to attend, either on a part-time or full-time basis):

- 1. None
- 2. Light
- 3. Moderate
- 4. Heavy
- 5. Total

42. Magnet-mandatory plan (where magnet schools are one component of a mandatory plan):

- 1. None
- 2. Light
- 3. Moderate
- 4. Heavy
- 5. Total

43. Rezoning or school closing (the placement of school attendance boundaries to include both majority and minority race children in every possible school within the zone. School closing is also included):

- 1. None
- 2. Light
- 3. Moderate
- 4. Heavy
- 5. Total

44. Education Parks (a centrally located single facility which replaces other schools previously in the area):

- 1. None
- 2. Light
- 3. Moderate
- 4. Heavy
- 5. Total

45. Estimate the amount of busing before the plan was implemented (zero being none; 10 indicates very extensive)

white only

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

minorities only

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

total

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

46. Estimate the amount of busing taking place after plan implementation (zero being none; 10 indicates very extensive)

white only

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

minorities only

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

(Questions 45, 46 & 47 were omitted)

Cont.

46. Cont.

total

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

47. Estimate the approximate increase in busing as a result of the plan (zero being none; 10 indicates extremely large)

white only

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

minorities only

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

total

% _____ exact no. _____

0 1 2 3 4 5 6 7 8 9 10

Desegregation Plan Implementation

48. Estimate the percentage of white students reassigned as a result of the plan (either voluntary or "forced"). (Zero means none; 10 means virtually 100%).

1 2 3 4 5 6 7 8 9 10

49. Estimate the percentage of black students reassigned as a result of the plan (either voluntary or "forced"). (Zero means none; 10 means virtually 100%).

1 2 3 4 5 6 7 8 9 10

50. Is the plan district-wide?

1. No
2. Yes

51. Rate the degree to which leaders of the white community were favorable to the plan (zero being strongly opposed; 10 being highly favorable):

1 2 3 4 5 6 7 8 9 10

- ___ 52. Rate the degree to which the general white population was favorable to the plan (zero being strongly opposed; 10 being highly favorable):
- 0 1 2 3 4 5 6 7 8 9 10
- ___ 53. Rate the degree of satisfaction with plan implementation by the white community (zero being not at all satisfied; 10 being totally satisfied):
- 0 1 2 3 4 5 6 7 8 9 10
- ___ 54. Rate the degree to which the black community was favorable to the plan (zero being strongly opposed; 10 being highly favorable):
- 0 1 2 3 4 5 6 7 8 9 10
- ___ 55. Rate the degree of satisfaction with plan implementation by the black community (zero being not at all satisfied; 10 being totally satisfied):
- 0 1 2 3 4 5 6 7 8 9 10
- ___ 56. Estimate the extent to which the local school board was divided in its support of the plan:
- ___ 1. Unanimously in favor
- ___ 2. Predominantly in favor
- ___ 3. Closely divided but in favor
- ___ 4. Closely divided but in opposition
- ___ 5. Predominantly opposed
- ___ 6. Unanimously opposed
- ___ 57. Was some form of officially sanctioned citizen participation required as part of the plan implementation (e.g., committee of 100, special desegregation committee)?
- ___ 1. No
- ___ 2. Yes
- ___ 58. How did formal citizen participation take place, if any?
- ___ 1. Group appointed voluntarily by superintendent or board
- ___ 2. Group required by court but appointed by superintendent or board
- ___ 3. Group appointed by court
- ___ 4. Group part elected from district and part appointed by superintendent or board (all done voluntarily)
- ___ 5. Group part elected from district and part appointed by superintendent or board under court order

Cont.

58. Cont.

___ 6. Court mandated election from district

___ 7. Other arrangement _____

___ 8. No such group existed

___ 59. Indicate the power of the citizens group regarding plan formulation:

___ 1. Advisory only

___ 2. Binding by court order

___ 3. No such groups existed

___ 60. Indicate the extent of citizen group involvement in plan implementation:

___ 1. Advisory only

___ 2. Binding by court order

___ 3. Was not involved in implementation

___ 4. No such groups existed

___ 61. If citizen group was involved in implementation, estimate for what period of time:

___ 1. First one or two years only

___ 2. Three or more years

___ 3. No such groups existed

___ 62. Was an outside professional, expert advisor, or "special master" required by the court?

___ 1. No

___ 2. Yes

___ 3. Unknown

___ 63. Indicate the scope of services of the outside professional:

___ 1. Only to develop plan

___ 2. Only to oversee plan implementation

___ 3. Both develop and oversee implementation

___ 4. No such person hired

___ 64. Was a new superintendent hired primarily for purposes of either plan formulation or implementation?

___ 1. No

___ 2. Yes, for plan formulation and implementation

___ 3. Yes, for implementation of plan created by others

- ___ 65. Rate the degree to which the attitudes and actions of the school superintendent favored the plan (zero being strongly opposed; 10 highly favorable. If nothing reported, assign five.)

0 1 2 3 4 5 6 7 8 9 10

- ___ 66. Rate the degree of support for the plan on the part of the local media (zero being strongly opposed; 10 being highly favored. If nothing reported, assign five.)

0 1 2 3 4 5 6 7 8 9 10

- ___ 67. Did organized anti-desegregation groups (usually with a name or initials) develop to oppose the desegregation effort?

___ 1. No

___ 2. Yes

- ___ 68. Rate the effectiveness of organized anti-desegregation groups (zero being totally ineffective in impeding the desegregation effort; 10 being extremely effective in impeding, delaying, or otherwise preventing desegregation):

0 1 2 3 4 5 6 7 8 9 10

- ___ 69. Rate the degree to which litigation has impeded desegregation since the original court decision (zero indicates no further litigation, or litigation has not impeded desegregation at all; 10 indicates litigation completely halted any move to desegregate):

0 1 2 3 4 5 6 7 8 9 10

- ___ 70. Rate the degree to which violence accompanied plan implementation (violence is defined as the exertion of physical force with the intent to injure individuals, destroy property, or physically impede the desegregation process). Zero indicates no violence; 10 indicates total or extreme violence :

0 1 2 3 4 5 6 7 8 9 10

- ___ 71. Rate the degree of community resistance to the plan other than by physical violence, as manifested by such things as demonstrations, boycotts, protests, verbal harassment (zero means no resistance; 10 indicates total or extreme resistance):

0 1 2 3 4 5 6 7 8 9 10

- ___ 72. Rate the degree to which overall community resistance (organized, unorganized, violent, nonviolent) has impeded desegregation following the original court order or other major impetus to desegregate (zero being no impediment; 10 being completely halted any move to desegregate):

0 1 2 3 4 5 6 7 8 9 10

- ___ 73. Rate the approximate increase in private school enrollment accompanying the plan (zero being none; 10 being very extensive):

0 1 2 3 4 5 6 7 8 9 10

- ___ 74. Rate the degree to which the burden of compliance falls on black and/or white students (-10 indicates that the burden falls entirely on black students; +10 indicates that the burden falls completely on white students; 0 indicates that the burden falls equally on black and white students.)

-10 -5 0 +5 +10

- ___ 75. Rate the degree to which overall racial balance has improved since the plan was put into effect (racial balance defined as the extent to which each school in a district equals or closely approximates the racial composition of the entire school system):

- ___ 1. Little or no substantial change (30% or fewer of schools have achieved racial balance)
- ___ 2. Moderate to fairly substantial change (30% to 60% have achieved racial balance)
- ___ 3. Substantial change or virtually complete racial balance (more than 60% of schools have achieved racial balance)

- ___ 76. What is the stage or phase of the desegregation plan at the time of the major report?

- ___ 1. Initial stage (first two years)
- ___ 2. Middle stage (third or fourth year)
- ___ 3. Advanced stage (more than four years)

- ___ 77. What is your opinion as to the total effectiveness of the desegregation plan? In considering overall effectiveness, account for such factors as compliance, litigation, white flight, massive transfers to private schools, violence, racial balance achieved. Zero indicates that the plan was totally ineffective; 10 indicates a totally effective plan.

0 1 2 3 4 5 6 7 8 9 10

78. Your major report writer: _____

79. Date this instrument completed: _____

80. Coder/analyst: _____

List of sources used in completing this survey (specific citations). Mark the major report used.

81. The major study appears as:
- ☐ 1. Civil Rights Commission report
 - ☐ 2. Book or part thereof
 - ☐ 3. Unpublished report from district
 - ☐ 4. Court Case
 - ☐ 5. Journal article
 - ☐ 6. Dissertation
 - ☐ 7. Other (specify) _____
82. Date of the major study
- ☐ 1. 1968-69
 - ☐ 2. 1970-71
 - ☐ 3. 1972-73
 - ☐ 4. 1974-75
 - ☐ 5. 1976-77
 - ☐ 6. 1978-79
 - ☐ 7. 1980
83. The primary author of the study is:
- ☐ 1. CRC advisory committee
 - ☐ 2. Academic
 - ☐ 3. School official or staff
 - ☐ 4. School lay committee
 - ☐ 5. Court
 - ☐ 6. Outside research organization or consultant
 - ☐ 7. Other (specify) _____
84. Your overall evaluation of the quality of the study based on the adequacy of the evidence (completeness and comprehensiveness) presented in the report:
- ☐ 1. good
 - ☐ 2. Moderate
 - ☐ 3. Poor

APPENDIX B

GLOSSARY OF DESEGREGATION TERMS

Compiled primarily from:

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Desegregating America's Schools. New York: Longman.

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Busing--refers to any means by which students are transported between home and school when paid for by public funds. Most of the transportation is indeed provided by district-owned or contract buses. In some larger cities, however, students ride existing public transportation systems. "Increase in busing" is derived in such a way that the actual mode of transportation in each separate district does not affect the actual calculations.

Clustering--the method that combines three or more schools, any one or more of which may have been previously segregated, into desegregated facilities with different grade levels in each.

De facto segregation--a separation of students by race which the law recognizes as having happened either by sheer accident or because of housing patterns, with no local or state action responsible for the separation.

De jure segregation--although frequently equated with "southern" segregation in the 17 southern and border states, de jure segregation in fact refers to any separation of students by race which results from official school board, city, or state action.

Educational parks--large school sites with several buildings, centralized administration, consolidated media, and physical education facilities. Frequently, as many as 10,000 students are served in a grade structure from pre-K to grade 12. Few if any such organizational facilities actually exist.

Magnet-mandatory plan--a form of magnet school that is not optional. The choice is not between a segregated neighborhood school and a desegregated magnet school. Parental choices are: (1) leave the school system, (2) accept the forced reassignment to a desegregated school, or (3) choose a desegregated magnet school.

Magnet-only plan--an essentially voluntary program under which parents may choose to send their children to a citywide or areawide school offering a special curriculum or educational program. Magnet-only plans depend on making such schools sufficiently attractive to induce parents to voluntarily leave their segregated neighborhood schools.

Majority-to-minority transfer--a method of voluntary student assignment by which students who are enrolled in schools in which their race is in the majority may transfer to any school (in the same district) where their race is in the minority. Usually, the school district is obliged to provide transportation. The hope is to produce a voluntary leveling of racial imbalances between schools.

Metropolitan plan--a desegregation plan that crosses established school district lines. In effect, metropolitan plans call for interdistrict remedies to segregation.

Open enrollment--a voluntary student assignment approach that permits parents to choose any school within a district for their children to attend. In the North, it is frequently the first hesitant step taken by a desegregating school district; in the South, it was the predominant form of desegregation under the appellation of "freedom of choice."

Pairing--a method of desegregating two schools, one predominantly white, the other minority, which serve the same grades. Instead of both schools containing K-6, after pairing one school might have grades K-3 and the other grades 4-6, with students drawn from the former attendance zones of both schools. Both schools would share the white and minority populations of the enlarged zone.

Racial balance--a requirement that the racial makeup of each school in a district equal or approximate the racial composition of the entire community.

Resegregation--the return of previously desegregated schools to segregated conditions. Population mobility and the disposition of some parents to send their children to private schools are frequent causes of this.

Rezoning--the redrawing of attendance area boundaries so that the newly constituted attendance areas more closely reflect the racial composition of the entire school community.

School closing--frequently a part of a larger desegregation plan, the closing of a school and the redistribution of its student body into other schools not of the same racial makeup is one way to change the racial identity of schools.

Special master--an expert appointed by the court to act as the representative of the court in the development of a desegregation plan.

Voluntary desegregation--a desegregation plan in which the school district decides to desegregate its schools without direction from the courts.

White flight--a term often used instead of white enrollment decline. Although it generally refers to the tendency for white middle- and upper-class families to relocate out of communities that implement desegregation plans, it may also include those students who have opted for private schools.

Zoning or rezoning--the placement of school attendance boundaries to include both majority and minority race children in every possible school.

APPENDIX C

REFERENCES FOR CASE PROFILES

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Longman, 1981.

RACINE, WI

USCCR. School Desegregation in Racine, Wisconsin, June, 1977.

APPENDIX D

ADDITIONAL COMMENTS ABOUT INTERCODER RELIABILITY

Each case survey instrument included 87 possible questions to which the analyst-readers could respond. However, for some case studies many of the questions asked were not applicable to the district's desegregation effort. For example, in San Francisco only elementary schools were involved in the desegregation process. Thus, questions on the case survey seeking information about desegregation strategies employed at the junior high and high school levels were coded as non-applicable. In addition, as the project progressed it became apparent that certain types of data were simply not reported in most case studies: busing figures by level before and after desegregation effort; number of students reassigned to schools as a result of desegregation plan; and private school enrollment increases as a result of desegregation.

With respect to busing data it was decided to omit questions 35 through 37 (busing at junior high level) and questions 45 through 47 (busing at high school level) and record for questions 25 through 27 (questions originally designed to capture busing figures only at the elementary level) busing information for the entire district. The exclusion of junior high and high school busing questions reduced the total number of survey questions to 69.

Using these survey modifications, an item-by-item intercoder agreement analysis was performed. Table 18 shows the number of response categories for each question, observed agreement for each question,¹ and

the number of questions that one or both analyst-readers felt were impossible to answer.

As Table 18 shows, the mean level of interanalyst agreement across the 69 applicable questions is 86 percent. The table also reveals that of the possible 610 questions across the 10 surveys that the analyst-readers could have responded to, for 159 (26%) questions either one or both of the coders felt the question was impossible to answer. (The total number of questions is 10×69 or 690 minus 80 questions which were nonapplicable.) Of these 159 questions, approximately 53 percent (68 questions) were questions concerning busing or student reassignment. Excluding these questions the number of impossible to answer questions is 91 or 15 percent.

NOTE

1. For questions which had a response range of 11, agreement was recorded if the two analysts' responses were within one code, in either direction, of each other. For example, if the initial coder had chosen the response of 4, agreement was recorded if the second coder chose either a 3, 4, or 5.

TABLE 18

PERCENT OF AGREEMENT BETWEEN TWO OBSERVERS BY ITEM, 10 CASES

Question	No. of Response Categories ^a	Observed ^b Agreement (%)	Questions ^c Impossible to Answer
10	3	80	0
11	3	100	1
12	2	88	2
13	Date	100	0
14	Date	100	1
15a	2	90	0
15b	Date	70	0
16	3	68	0
17	3	100	1
18	5	67	0
19	5	89	0
20	5	88	0
21	5	88	1
22	5	89	0
23	5	44	0
24	5	100	0
25a	11	100	9
25b	11	100	9
25c	11	100	5
26a	11	100	9
26b	11	100	9
26c	11	100	5
27a	11	100	9
27b	11	100	9
27c	11	100	4
28	5	100	1
29	5	100	1
30	5	100	1

TABLE 18 CONTINUED

Question	No. of Response Categories ^a	Observed ^b Agreement (%)	Questions ^c Impossible to Answer
31	5	100	1
32	5	100	1
33	5	33	1
34	5	100	1
35a-37a questions omitted			
38	5	100	1
39	5	100	1
40	5	100	1
41	5	100	1
42	5	100	1
43	5	40	1
44	5	100	1
45a-47c questions omitted			
48	11	100	8
49	11	100	8
50	2	100	0
51	11	57	3
52	11	71	3
53	11	66	7
54	11	80	5
55	11	66	7
56	6	75	2
57	2	90	0
58	8	89	0
59	3	75	1
60	4	78	0
61	3	83	3
62	3	89	0
63	4	100	1

TABLE 18 CONTINUED

Question	No. of Response Categories ^a	Observed ^b Agreement (%)	Questions ^c Impossible to Answer
64	3	100	0
65	11	70	0
66	11	100	0
67	2	100	2
68	11	83	3
69	11	100	2
70	11	88	2
71	11	75	2
72	11	75	2
73	11	67	7
74	5	67	1
75	3	75	2
76	3	100	0
77	11	70	0
		$\bar{X} = .86$	159

^aSee questionnaire in Appendix A.

^bIncludes items answered "sure" and "not sure."

^cEither one or both of the analyst-readers responded to the question as "impossible to answer."

APPENDIX E

TABLE 19

YEAR PRIOR TO AND YEAR OF
MAJOR DESEGREGATION EFFORT BY GRADE LEVEL

District Name	<u>Systemwide</u>		<u>Elementary</u>		<u>Secondary</u>	
	T-1 ^a	T ^b	T-1 ^a	T ^b	T-1 ^a	T ^b
Birmingham, AL	1969	1970	1969	1970	1969	1970
Mobile County, AL	1970	1971	1970	1971	1970	1971
Pasadena, CA	1969	1970	1969	1970	1969	1970
Richmond, CA	1968	1969	1968	1969	1968	1969
San Francisco, CA	1970	1971	1970	1971	NA ^d	NA ^d
Stockton, CA	1974	1976 ^c	NA ^d	NA ^d	1974	1976 ^c
Colorado Springs, CO	1969	1970	NA ^d	NA ^d	1969	1970
Denver, CO	1973	1976 ^c	1974	1976 ^c	1973	1974
Broward County, FL	1969	1971	1970	1971	1969	1970
Dade County, FL	1969	1970	1969	1970	1969	1970
Duval County, FL	1970	1972	1970	1972	1970	1972
Escambia County, FL	1968	1969	1968	1969	1968	1969
Hillsborough County, FL	1970	1971	1970	1971	1970	1971
Leon County, FL	1969	1970	1969	1970	1969	1970
Orange County, FL	1968	1973	1972	1973	1968	1969
Pinellas County, FL	1970	1971	1970	1971	1970	1971
Polk County, FL	1968	1969	1968	1969	1968	1969
Volusia County, FL	1968	1970	1969	1970	1968	1969
Atlanta, GA	1972	1973	1972	1973	1972	1973
DeKalb County, GA	1968	1969	1968	1969	1968	1969
Peoria, IL	- ^e	1968	- ^e	1968	- ^e	1968
Vanderburgh County, IL	1969	1972	1971	1972	1969	1970
Wichita, KS	1968	1971	1970	1971	1968	1969
Jefferson County, KY	1974	1976 ^c	1974	1976 ^c	1974	1976 ^c
Baltimore, MD	1973	1976 ^c	1973	1974	1974	1976 ^c
Prince George's County, MD	1972	1973	1972	1973	1972	1973
Boston, MA	1973	1976 ^c	1974	1976 ^c	1973	1974
Flint, MI	1974	1976	1974	1976	1974	1976
Grand Rapids, MI	1969	1970	1969	1970	1969	1970
Lansing, MI	1974	1976	1974	1976	NA ^d	NA ^d

District Name	Systemwide		Elementary		Secondary	
	T-1 ^a	T ^b	T-1 ^a	T ^b	T-1 ^a	T ^b
Pontiac, MI	1970	1971	1970	1971	NA ^d	NA ^d
Minneapolis, MN	1971	1972	1971	1972	1971	1972
Omaha, NE	1974	1976	1974	1976	1974	1976
Clark County, NV	1971	1972	1971	1972	NA ^d	NA ^d
Forsyth County, NC	1970	1971	1970	1971	1970	1971
Greensboro, NC	1970	1971	1970	1971	1970	1971
Mecklenberg County, NC	1969	1970	1969	1970	1969	1970
Oklahoma City, OK	1971	1972	1971	1972	1971	1972
Tulsa, OK	1970	1971	1970	1971	1970	1971
Providence, RI	1969	1971	1969	1970	1969	1971
Greenville County, SC	1969	1970	1969	1970	1969	1970
Memphis, TN	1972	1973	1972	1973	1972	1973
Nashville-Davidson County, TN	1970	1971	1970	1971	1970	1971
Austin, TX	1970	1973	1972	1973	1970	1971
Corpus Christi, TX	1974	1976 ^c	MD ^f	MD ^f	1974	1976 ^{c,g}
Dallas, TX	1974	1976	1974	1976	1974	1976
Houston, TX	1974	1976	1974	1976	1974	1976
Newport News, VA	1970	1971	1970	1971	1970	1971
Richmond, VA	1970	1971	1970	1971	1970	1971
Tacoma, WA	- ^e	1968	- ^e	1968	- ^e	1968 ^g
Milwaukee, WI	1974	1976	1974	1976	1974	1976
Racine, WI	1973	1976	1974	1976	1973	1974

^aT-1 is the year prior to major desegregation effort. In cases of "phased-in" plans, T-1 may be more than one year prior to T.

^bT is the year of major desegregation effort. In cases of "phased-in" plans, T is the last year of the desegregation effort.

^cYear of desegregation is actually 1975. Since the Office of Civil Rights did not collect data in 1975, 1976 is used as the implementation year.

^dDistrict's desegregation actions did not involve this level.

^eThe Office of Civil Rights began its annual survey of school districts in 1968. Data prior to this year are not available.

^fThe elementary school desegregation scores (dissimilarity index scores) for Corpus Christi are missing for years 1972-76.

^gAt the secondary level, only middle schools were involved in the desegregation process (not high schools). The data available to us, however, exists only at two levels--elementary and secondary. Inspection of the codebook supplied to us with the data indicates that in preparing the data, the OCR placed middle schools in the secondary level category.

TABLE 20
DISSIMILARITY INDEX SCORES^a
OVER TIME

District Name	T-3	T-2	T-1	T ^b	T+1	T+2	T+3
Birmingham, AL	-	92.3	90.1	75.6	74.9	76.1	77.5
Mobile County, AL	88.8	75.7	69.6	51.7	52.5	52.7	55.1
Pasadena, CA	-	54.0	50.3	11.6	10.1	10.4	10.6
Richmond, CA	-	-	50.4	47.0	44.9	44.1	43.0
San Francisco, CA ^c	46.6	46.6	44.9	16.2	15.7	15.9	17.4
Stockton, CA ^d	45.6	43.9	42.8	27.1	-	-	-
Colorado Springs, CO ^d	-	48.2	45.3	33.9	29.6	26.0	23.9
Denver, CO	46.8	46.9	46.0	18.3	-	-	-
Broward County, FL	-	81.3	79.4	32.7	30.8	29.4	30.9
Dade County, FL	-	67.4	64.5	56.8	55.1	52.2	52.0
Duval County, FL	87.5	81.8	73.4	32.7	34.8	35.5	38.3
Escambia County, FL	-	-	78.3	50.8	51.1	51.4	51.9
Hillsborough County, FL	67.0	61.9	61.3	18.7	17.9	20.7	23.0
Leon County, FL	-	64.4	48.7	22.4	22.8	23.7	24.6
Orange County, FL	-	-	84.3	51.3	49.9	47.6	-
Pinellas County, FL	78.2	72.4	64.9	25.0	24.3	25.6	25.1
Polk County, FL	-	-	73.9	47.9	45.1	44.8	44.6
Volusia County, FL	-	-	74.1	26.5	26.1	25.0	26.4
Atlanta, GA	82.6	82.1	80.2	75.6	75.0	73.3	-
DeKalb County, GA	-	-	74.7	64.3	64.6	61.8	64.4
Peoria, IL	-	-	-	60.6	52.8	50.8	44.1
Vanderburgh County, IL	-	71.2	69.4	26.6	23.8	25.4	24.9
Wichita, KS	-	-	65.4	18.6	16.9	15.8	16.8
Jefferson County, KY	82.0	80.3	78.2	21.6	-	-	-
Baltimore, MD	82.2	82.2	81.7	67.1	-	-	-
Prince George's County, MD	63.5	61.4	60.8	26.2	27.3	28.7	-
Boston, MA	73.5	70.8	70.4	32.8	-	-	-
Flint, MI	59.9	63.9	64.6	56.7	-	-	-

TABLE 20 CONTINUED

District Name	T-3	T-2	T-1	T ^b	T+1	T+2	T+3
Grand Rapids, MI	-	65.8	59.8	57.2	57.3	53.1	53.1
Lansing, MI	32.5	27.4	28.1	15.8	-	-	-
Pontiac, MI ^c	72.4	69.3	68.7	18.1	19.8	16.7	16.2
Minneapolis, MN	55.8	55.2	53.0	50.6	47.4	39.1	37.8
Omaha, NE	67.1	66.2	60.0	26.6	-	-	-
Clark County, NV ^c	58.6	54.7	47.4	20.6	20.4	23.2	22.8
Forsyth County, NC	85.2	85.1	65.5	13.6	15.4	17.2	19.5
Greensboro, NC	81.7	80.6	81.4	27.3	14.1	17.2	17.1
Mecklenburg County, NC	-	72.6	67.3	16.6	13.1	13.9	13.8
Oklahoma City, OK	71.5	68.5	66.7	26.8	24.4	13.3	22.6
Tulsa, OK	65.3	65.3	67.1	60.7	59.7	57.6	55.6
Providence, RI	-	37.4	37.6	29.5	28.8	27.6	27.4
Greenville County, SC	-	85.0	80.3	16.7	12.2	13.9	13.6
Memphis, TN	90.3	88.4	85.5	52.1	51.0	56.3	-
Nashville-Davidson County, TN	81.2	79.7	76.7	36.2	37.8	38.4	40.4
Austin, TX	75.5	73.3	71.6	55.2	51.9	46.3	-
Corpus Christi, TX	61.8	60.4	57.4	34.4	-	-	-
Dallas, TX	70.4	68.5	68.1	55.5	-	-	-
Houston, TX	72.7	71.3	70.5	68.2	-	-	-
Newport News, VA	86.6	84.7	80.3	24.5	24.0	23.3	23.9
Richmond, VA	86.3	83.4	58.4	29.1	28.9	28.6	29.0
Tacoma, WA	-	-	-	38.2	34.5	29.1	27.0
Milwaukee, WI	76.1	73.6	72.0	51.3	-	-	-
Racine, WI	56.5	47.5	44.5	18.2	-	-	-

^aUnless otherwise noted, scores are for systemwide level.

^bT is the year of major desegregation effort.

^cDI scores are for elementary level only.

^dDI scores are for secondary level only.